

Rough River Lake Flowage Easement Encroachment Resolution Plan



Grayson, Breckinridge and Hardin Counties, Kentucky

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1 Intent

This report is designed to define the habitable structure encroachment problem at Rough River Lake (RRL) and set forth proposed resolutions. The scenarios discussed in this plan will be applied to all structures currently identified through proper surveys and those identified after the completion of proper surveys. The Assistant Secretary of the Army for Civil Works' (ASA(CW)) approval of the plan allows the United States Army Corps of Engineers (USACE) to execute the recommendation for each scenario without additional coordination with the ASA(CW) in most cases. If a structure is identified that does not meet any of the scenarios, Headquarters USACE (HQUSACE) will coordinate with the ASA(CW) to determine appropriate resolution in accordance with applicable USACE regulations.

Upon the one year anniversary of this plan's approval, the delegation from the ASA(CW) to the USACE Director of Real Estate for waiver of the human habitation restriction may be revisited and possibly re-delegated.

2 Preface

The Rough River Lake project is one in a series of four lake projects that provide flood control for the Green River Basin and, collectively, is operated as a comprehensive unit of flood control in the Ohio River Basin. The authorized purposes for RRL are: flood control, low flow augmentation for water quality, water supply, general recreation, and fish and wildlife management.

Construction of the lake began in November 1955 and was completed in September 1959. During the active years of real estate acquisition for this project, the "Eisenhower Acquisition Policy" for civil works projects was in effect. This policy restricted the taking of land in fee to lands only below the 5-year flood frequency elevation. The 5-year flood frequency elevation for RRL was computed to be elevation 514.0' m.s.l.¹, and the fee acquisition guide was established at this elevation. Additional lands needed for such purposes as project operations and public access areas were also acquired in fee. The flowage easement acquisition guide elevation was originally established at the 48-year flood frequency elevation of 534.0' m.s.l. An updated pool elevation frequency analysis was compiled after the record high pool event of 2011 by the Louisville District. This analysis includes approximately 50-years of observed data. As a result of the larger dataset, elevation 534.0' m.s.l. is now considered to be a 220-year flood frequency pool elevation. The frequency elevations, converted to m.s.l., are: 100-year - 530.6'; 500-year - 537.6'; and 1,000-year - 540.4'.

RRL is located in rural Breckinridge, Grayson, and Hardin Counties in South Central Kentucky. The principal surface characteristic of the Rough River Basin is, in general, a rugged topography with well-defined drainage. The project is in an irregular limestone region, and many of the hills bordering the lake contain outcroppings of rock which provide scenic enhancement to the area. The moderate to

¹ See Section 4. Definitions and Section 5.5 Vertical Datums for explanation of Mean Sea Level (m.s.l.)

severe elevation changes around the lake make it difficult to identify areas that lie above and below the 534.0' m.s.l. contour. In many areas, adjacent properties and structures may have greatly differing elevations.

Currently, RRL is surrounded by over 140 residential developments and, in the absence of encroachment resolution, continued growth and building modifications are expected. At RRL there are 319.8 miles of flowage easement boundary, 260 miles of shoreline and 266 miles of fee boundary to monitor. In addition, there are 4 campgrounds with 367 campsites, water patrol, shoreline management, and nearly 5,000 minor shoreline licenses and permits to manage. RRL welcomes approximately 1.5 million visitors each year.

3 References

Real Estate Design Memorandum No. 7, RRL, dated January 1958, "2. References. D. OCE 6th Indorsement, ENGWE letter dated 10 September 1956 on letter from LEDO, OVLGH to Ohio River Division dated 29 March 1956, subject: Guide Contours for Taking, Rough River Reservoir, which approved the guide taking contours for fee taking at elevation 514.0' m.s.l. and for flowage easement at 534.0' m.s.l. at the dam with appropriate allowance for backwater effects."

Army Regulation 405-80 Management of Title and Granting Use of Real Property

Engineer Regulation 405-1-11, Real Estate Acquisition

Engineer Regulation 405-1-12, Real Estate Handbook

Federal Management Regulation – Subchapter C. Real Property

Engineer Pamphlet 1165-2-1, Digest of Water Resources Policies and Authorities

Engineer Regulation 1165-2-119, Modifications to Completed Projects, Paragraph 8.a.

2015 Shoreline Management Plan for Barren, Nolin and Rough River Lakes

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. § 4601 et seq.)

The National Environmental Policy Act of 1969 (42 U.S.C. § 4321 et seq.)

The Federal Endangered Species Act (16 U.S.C. § 1531 et seq.)

The Fish and Wildlife Coordination Act (16 U.S.C § 661 et seq.)

The National Historic Preservation Act (54 U.S.C. § 300101 et seq.)

The Clean Water Act (33 U.S.C. § 1251 et seq.)

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. § 9601 et seq.) (CERCLA).

4 Definitions

a. Encroachment is a structure or improvement built, installed or established which interferes with a real estate interest of the United States, either a fee interest or an easement, if such is prohibited by the deed. An encroachment has occurred where an unapproved structure or improvement extends over, across, in or upon lands in which the Government owns a real estate interest.

b. Flowage Easement – Warranty deeds of flowage easement at RRL grant the United States the perpetual right, power, privilege and easement to occasionally overflow, flood and submerge the land and provide that no structure for human habitation shall be constructed on the lands and further that no structures of other types except farm fences shall be constructed or maintained on the lands except as may be approved in writing by the representative of the United States. The deeds reserve for the owners of the lands all such rights and privileges as may be used and enjoyed without interfering with or abridging the rights and easements conveyed. (See Exhibits A-1, B-1, and C-1)

c. Release of the Human Habitation Restriction, in accordance with ER 405-1-12 and Policy Guidance Letter No. 32, Use of Corps Reservoir Lands, dated 28 April 1993 (See Exhibit G), is a request that must be approved by the ASA(CW) unless the ASA(CW) delegates this authority. The release of the human habitation restriction in the flowage easement estate must be by deed. Certain minimum conditions must be met for a release of the human habitation restriction to be granted (see Section 7(d)), however, meeting these minimum conditions does not ensure that a release will be granted.

d. Structure or improvement, as defined by ER 405-1-12 and used in reference to encroachments, means a permanent or semi-permanent facility, such as a habitable dwelling, building, fence, deck, porch, barn, outhouse, permanent storage building, road, pond, leach field and septic tank, utility line, levee, excavation, placement of fill material, oil and gas well, mine entrance and tunnel.

e. Consent to Easement – consent to structures within flowage easements is generally granted for improvements that will not be damaged by temporary flooding, will not interfere with project operations, will not risk human health or safety, and are not prohibited by the flowage easement deed.

f. Fee Simple Acquisition – fee simple is absolute title to land, free of any conditions, limitations, restrictions, or other claims against the title.

g. Mean Sea Level (m.s.l.) – vertical distance above sea level as valued by data and modeling by the National Geodetic Survey.

5 Background

5.1 Existing Conditions

Based on the Design Memorandum for the project, RRL was designed to impound water to the seasonal elevation of 495.0' m.s.l., with a spillway crest of 524.0' m.s.l. The upper guide contour for acquiring fee simple lands was set at 514.0' m.s.l. The upper guide contour for acquiring flowage easements was set at 534.0' m.s.l, with appropriate allowance for backwater effects. However, it is important to note that the flowage easement boundary at RRL is not defined by a specific elevation but rather by metes and bounds legal descriptions that are set forth in the individual easement deeds.

During the original acquisition in the mid 1950's, the Louisville District hired a contractor to mark angle points along the 514.0' m.s.l. and 534.0' m.s.l. contours around the lake perimeter. The contractor surveyed and marked the intended flowage easement line; however, it was marked with temporary wooden stakes, and the lines were located and plotted with imprecisions, including closure imprecisions. Further, the 534.0' m.s.l. flowage easement elevation was described using tangent lines (straight-line approximations) instead of following the actual contour elevations of the land. The legal descriptions were prepared based on this information and then recorded as part of the acquisition deed. These recorded tangent line descriptions of flowage easements are difficult to accurately locate in the field. In addition, as a result of using the tangent lines for the legal descriptions, flowage easements were not acquired up to the 534.0' m.s.l. throughout the entire project as intended; and in many areas, flowage easements were acquired above the 534.0' m.s.l. Furthermore, fee simple was not always acquired up to 514.0' m.s.l. as was originally authorized. In managing the flowage easement encroachments at RRL, the Government can only enforce the rights obtained through the acquired flowage easements. The deeds for all acquired flowage easements at RRL, regardless of their elevation, prohibit habitable structures. (See Exhibits A, B, and C for 2013 flowage easement survey plats; see Exhibits A-1, B-1 and C-1 for corresponding recorded flowage easement deeds.) As detailed in Section 11, within one year of this Plan's approval, USACE will submit a comprehensive acquisition plan for ASA(CW) approval that addresses any necessary project acquisitions below 534.0' m.s.l.

Prior to the record flood event, the upper guideline for acquired flowage easements was assumed to be at or on the 534.0' m.s.l., as authorized by the referenced Design Memorandum. After the record flood event, 32 habitable structures (mobile homes) that were located below the 534.0' m.s.l. and were completely inundated were required to be removed and replaced with recreational vehicle style campers. One landowner provided a survey identifying the flowage easement line as being located significantly below the 534.0' m.s.l. The District acquired a survey to verify the findings at this location. The results further defined the magnitude of the flowage easement problem at RRL.

Prior to the actual surveys, the District utilized Geographic Information System (GIS) data, aerial imagery and recently obtained LIDAR (Light Detection and Radar, a remote survey technology used to measure elevation) data to estimate that a handful of habitable structures were located on the Government's

flowage easements. After completion of the surveys in 2013, 2014, and 2015, approximately 416 habitable structures were identified to be located within the acquired flowage easements. Many of these homes flooded during the 2011 record flood event.

Although the District actively manages encroachments (See Section 5.2. Project Management of Flowage Easement), before the Government can reasonably initiate an enforcement action against future and/or existing encroachers, the Government must first adequately survey the affected areas to prove the location of the Government's flowage easement rights. To date, approximately 51.05 miles of flowage easement boundary have been surveyed. Within the 51.05 miles, approximately 416 encroaching habitable structures have been identified. As encroachments are identified, the ongoing question is "How do we resolve them?".

In November 2014, a Louisville District Project Delivery Team (PDT) was established to develop recommendations for a comprehensive plan to resolve the encroachments of habitable structures on flowage easement lands at RRL. The purpose of the PDT is to deliver a long term strategic plan for the resolution of these flowage easement encroachments at RRL and for prevention of future encroachments.

In the interim, the ASA(CW) issued a Memorandum for the Director of Real Estate dated April 24, 2015 "placing a moratorium on the forced removal of all encroaching habitable structures at Rough River that completed construction prior to January 01, 2013, and are wholly above the elevation of 527.4' mean sea level, the record flood event level at this project." As part of the moratorium, "the District [was] directed to provide owners of habitable structures that are believed to be in a flowage easement a notice of this memorandum." These moratorium letters dated May 18, 2015 were sent to land owners with habitable structure encroachments identified by the 2013 and 2014 surveys. The project received funding in 2016 to complete an additional 85 miles of flowage easement surveys, focused primarily on densely developed areas.

5.2 Project Management of Flowage Easement

Enforcement of the Government's real estate interests at RRL has been difficult because of the uncertainty of the location of the fee and easement boundary lines. Regardless, the District has engaged in several activities to manage encroachments. In those situations where development is occurring and the planned development is within the Government's legally acquired flowage easement area, as determined by survey, the terms of the easement are enforced. In addition, the RRL Project Manager meets annually with land developers and real estate agencies conducting business at RRL to make them aware of the constraints of the flowage easement. As the flowage easement is surveyed, encroachments are identified, and the owners of encroaching structures are sent a moratorium letter signed by the District Commander (See Exhibit F). The RRL Project Manager meets with each encroaching landowner, identified in a USACE survey with the encroaching structures, to explain the flowage easement, identify the landowner's responsibilities, and discuss options for resolution of the encroachment. The RRL Project Manager and staff diligently monitor the areas surveyed in an effort to

prohibit any new construction before it begins. The RRL Project Manager and staff also monitor the entire 319.8 miles of the project boundary on an annual basis for any new developments. Upon observation of new construction, project staff make contact with the landowners to explain the flowage easement, identify the flowage easement and address the landowners' responsibilities in regard to compliance with the easement. The RRL Project Manager provides copies of the USACE surveys and works with the local health departments and utilities in an effort to ensure no new utilities are installed below elevation 534' m.s.l. and any system that poses a risk to human health or safety is removed.

5.3 Flowage Easement Timeline (2011 to Nov 2014)

April – June 2011: Record flood reached elevation 527.4' m.s.l. The District estimated that over 226 habitable structures were completely or partially flooded.

May 2011: The District sent letters to all electric utility companies and health department officials in Breckinridge and Grayson Counties to advise them of the Government's flowage easement rights in regard to construction within the boundary of the respective flowage easements.

June 2011: Flowage Easement Encroachment Overview at RRL was presented by the RRL Project Manager to the District Real Estate and Operations Chiefs and the District Commander.

June 2011: A meeting was conducted at the District Office between the Real Estate (RE), Operations (OP), and Green River Area (GRA) Managers, the RRL Project Manager and the Nolin River Lake (NRL) Project Manager to discuss the development of a policy to address flowage easement encroachments. At this meeting, it was agreed that RRL personnel would lead policy development working with RE, OP and GRA Managers to develop a guide and begin implementation. It was also agreed that in accordance with ER 405-1-12, Chapter 8, Section III, Real Estate Management Programs - Encroachment and Trespass, Paragraph 8-27, Special Considerations for Structures at Civil Works Projects, subparagraph a., and Policy Guidance Letter No. 32, "Use of Corps Reservoir Flowage Easement Lands," existing encroaching structures would be removed or the human habitation restriction would be released on existing structures meeting the criteria.

June 2011: RRL Project Manager began development of a Flowage Easement Encroachment Resolution Guide.

May – Aug 2011: RRL Project Manager briefed congressional interests on the issues involving flowage easements at RRL, specifically the residences that flooded during the 2011 flood event.

November 2011: The Guide to Flowage Easement Encroachment Resolution was finalized, and implementation began at RRL upon concurrence from the District. (See Exhibit D)

November 2011: RRL Project Manager met with local realtors to inform them of flowage easements and how they apply to properties they list for sale.

January 2012: Congressional Flowage Easement Fact Sheet was developed to prepare for future congressional interest in flowage easement encroachment issues at RRL.

Sept – Oct 2013: An initial survey utilizing the Division IDIQ (Indefinite-Delivery Indefinite- Quantity) contract was conducted on five (5) miles of flowage easements, encompassing four (4) subdivisions. This survey identified numerous issues. Some portions of the flowage easements were found to be well above 534.0' m.s.l. and some well below. Upon completion of the survey, the RRL Project Manager identified habitable structures located in the surveyed portion of the flowage easements.

2014: The District IDIQ contract was utilized to complete an additional 18.3 miles of flowage easement survey encompassing 26 subdivisions. Findings of this survey were consistent with the findings of the Sept-Oct 2013 survey.

June 2011 to Present: A total of 32 permanent habitable structures (mobile homes) have been removed from flowage easements at RRL.

November 2014: Representatives of the U.S. Attorney's Office for the Western District of Kentucky were briefed on the situation at RRL by the District PDT. The U.S. Attorney's office may assist USACE in enforcing the acquired flowage easement rights, as necessary, to be determined on a case-by-case basis.

5.4 Survey Results

The 2013, 2014, and 2015 flowage easement surveys were completed by SEAS, Inc. and GRW, Inc. through the use of an existing IDIQ contract. The contract scopes of work, methods and deliverables have been and will be consistent for all future task orders. This will ensure there is uniformity throughout the project in the process of identifying the flowage easement boundary and existing habitable structure encroachments.

As of July 2016, approximately 51.05 miles of flowage easement had been surveyed. Surveyed areas included flowage easements associated with 75 of 143 residential developments and identified approximately 416 habitable structures within acquired flowage easements, which are identified as follows:

- 209 habitable structures on easement above 534.0' m.s.l. (See Section 9, Scenario A)
- 138 habitable structures on easement partially below 534.0' m.s.l. (See Section 9, Scenarios B & D)
- 69 habitable structures on easement completely below 534.0' m.s.l. (See Section 9, Scenario C)

Based on average encroachments per mile of previous surveys completed, the District estimates the 2016 survey could identify an additional 700 possible habitable structure encroachments within the additional 85 miles of surveyed flowage easement.

5.5 Vertical Datums

The vertical datum of Mean Sea Level (m.s.l.) was utilized in the original design, construction, and real estate acquisitions of the RRL project and is used throughout this report unless otherwise noted. Mean Sea Level has been deemed unacceptable and is no longer used, however the following illustrates how m.s.l. still applies to RRL.

The historical elevation values of the RRL control monuments come from the original design drawings. Elevations on the design drawing say they are referenced to Mean Sea Level. Specifically, the elevation of control monument "T-1", which is a point just inside the door of the control tower, is 551.06'. Since the origin and vertical datum of this elevation value are not documented, we refer to it as the Corps of Engineers (COE) datum. The COE elevation of control monument "CM-1" was established by differential leveling from "T-1". The NAVD 1988 elevation of control monument "CM-1" was established by averaging multiple GNSS solutions derived from the Online Positioning User Service (OPUS).

Construction of the RRL dam began in November of 1955. At that time, the National Geodetic Vertical Datum of 1929 (NGVD1929) was widely used and was the only national vertical datum. NGVD1929 was also widely referred to as the "Mean Sea Level Datum". In 1973 it was determined by the National Oceanic and Atmospheric Administration (NOAA) that the term "Mean Sea Level" was ambiguous and should not be used. Although documentation and survey notes have not been located, it is likely that the elevations at the Rough River dam originate from a NGVD1929 bench mark. This is evidenced by the fact that the difference between NGVD1929 and NAVD1988, as determined by Corpscon/Vertcon, is 0.5' (rounded from 0.47'), and the difference between the COE datum and NAVD1988, by comparing differential leveling to the OPUS derived elevation, is 0.43'. Therefore the difference between COE datum and NGVD1929 at CM-1 is 0.04'. This difference is within the rounding error and therefore considered negligible. The elevation values for CM-1 on all three vertical datums are as follows:

- COE-554.89' (By differential leveling from control monument "T-1")
- NAVD88-554.46' (Average of multiple OPUS solutions)
- NGVD29-554.9' (Computed by Corpscon/Vertcon and rounded from 554.93')

6 Environmental Considerations and Compliance

The National Environmental Policy Act of 1969, 42 U.S.C. § 4321 et seq., commonly referred to as NEPA, requires agencies to consider the environmental effects of proposed actions prior to making decisions. The Council on Environmental Quality (CEQ) promulgates regulations for the implementation of NEPA

(40 C.F.R. §§ 1500-1508). In accordance with 40 C.F.R. § 1507.3, USACE has promulgated supplemental regulations for implementation of NEPA for Civil Works projects, 33 C.F.R. §§ 230.1-230.26. All agency actions are subject to NEPA, but some agency actions do not individually or cumulatively have a significant effect on the quality of the human environment (40 C.F.R. § 1508.4); these kinds of actions are considered “Categorical Exclusions” (CATEXs). If a particular agency action qualifies as a CATEX, and there are no extraordinary circumstances that dictate a need to prepare an Environmental Assessment (EA) or an Environmental Impact Statement (EIS), it is excluded from the requirements of NEPA documentation but is not exempt from compliance with any other Federal law (33 C.F.R. § 230.9). Other Federal laws include the Federal Endangered Species Act (16 U.S.C. § 1531 et seq.), the Fish and Wildlife Coordination Act (16 U.S.C. § 661 et seq.), the National Historic Preservation Act (54 U.S.C. § 300101 et seq.), the Clean Water Act (33 U.S.C. § 1251 et seq.), and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. § 9601 et seq.) (CERCLA).

The recommendations of the RRL Encroachment Resolution Plan include a number of potential agency actions that may qualify as CATEXs. Specifically, “[b]oundary line agreements and disposal of lands or release of deed restrictions to cure encroachments,” (33 C.F.R. § 230.9(n)) and “[d]isposal of excess easement interest to the underlying fee owner” (33 C.F.R. § 230.9(o)) are considered CATEXs. Actions and proposed resolutions in Section 9 of the Encroachment Resolution Plan would qualify for these CATEXs unless a particular case presents extraordinary circumstances that, in the opinion of the District Commander, would warrant preparation of an EA or an EIS. As the recommendations of the Encroachment Resolution Plan are implemented, the applicability of CATEXs will be determined for each encroachment.

The action and proposed resolution for the encroachments that do not satisfy the requirements for a CATEX may require an EA or an EIS. Preparation of either of these documents requires a cumulative effects analysis. NEPA defines cumulative effects as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions (40 CFR § 1508.7)”. The CEQ developed a Handbook in 1997 entitled “Considering Cumulative Effects Under the National Environmental Policy Act (NEPA) as amended (42 U.S.C. § 4321 et seq.)”, to provide a framework for addressing cumulative environmental impacts in either an EA or an EIS. The handbook provides methods for addressing coincident effects on specific resources, ecosystems, and human communities for all related activities including all relevant activities not just the actions of the proposed project or alternatives. Determining the cumulative environmental consequences of an action requires delineating the cause-and-effect relationships between the multiple actions and the resources, ecosystems, and human communities of concern. CEQ issued guidance in 2010 concerning establishing, applying, and revising categorical exclusions under NEPA. The guidance recommends that agencies consider the frequency with which the categorically-excluded actions are applied. In accordance with the guidance, as the encroachment resolution plan is implemented at RRL, the District will track and periodically assess the use of the categorical exclusions to ensure that cumulative impacts do not rise to a level that would warrant further NEPA analysis and documentation, if appropriate.

Initial coordination with the U.S. Fish and Wildlife Service and the Kentucky Department of Fish and Wildlife Resources indicates that a brief letter to the U.S. Fish and Wildlife Service describing the location and habitat characteristics of the proposed action is likely to satisfy the requirements of the Federal Endangered Species Act (16 U.S.C. § 1536) and the Fish and Wildlife Coordination Act (16 U.S.C. § 661) when the encroachment resolution entails the disposal of an existing flowage easement to the underlying fee owner. As each encroachment is resolved, the applicability and requirements of all Federal laws will be determined, and any necessary actions for compliance will be accomplished.

Works of the United States built for harbor or river improvements, such as RRL, are protected against alteration, occupancy, and use (whether permanent or temporary) by individuals without prior authorization by USACE (33 U.S.C § 408). Specifically, “[n]o encroachment or trespass which will adversely affect the efficient operation of maintenance of the project works shall be permitted,” (33 C.F.R. § 208.10(a)(4)). Individuals, such as landowners at RRL, can request permission for such alterations through the process established in Engineer Circular 1165-2-216 (July 31, 2014), and the USACE may approve such a request when the activity will not be injurious to the public interest and will not impair the usefulness of the project. In the future, landowners may desire to alter the habitable structures that are otherwise addressed through implementation of the RRL Encroachment Resolution Plan and will need to follow the process established by USACE for granting such permission.

Executive Orders 11988 (Floodplain Management) 42 Fed. Reg. 26951 (May 24, 1977) and 13690 (Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input) 80 Fed. Reg. 6425 (February 4, 2014) establish the policy of the United States to improve the resilience of communities and Federal Assets against the impacts of flooding and to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid the direct or indirect support of floodplain development whenever there is a practicable alternative. Executive Order 11988 provides that when property in a floodplain is proposed for lease, easement, right-of-way, or disposal, the Federal agency shall accomplish the objectives of the policy by ensuring conveyances include the uses restricted by floodplain regulation, attach other appropriate restrictions to the uses of properties, or withhold the properties from conveyance (Exec. Ord. 11988 § 3(d)). The policy of Executive Order 11988 is incorporated into the requirements of Policy Guidance Letter No. 32, Use of Corps Reservoir Flowage Easement Lands, April 28, 1993 (See Exhibit G) and when assessing requests for the release of the human habitation restriction. The RRL Encroachment Resolution Plan includes the critical assumption that releases of the human habitation restriction will only be allowed where no practical alternative is available.

7 Resolution Framework

Scenarios to address the problems discussed in Section 5 above were designed based upon existing situations and regulatory guidance in an effort to develop an encroachment resolution plan. Currently,

there is no established template for an encroachment resolution plan. The Real Estate Resolution Framework for this encroachment plan includes all of the factors that could potentially limit the encroachment resolution process. Factors identified for this resolution plan include the following:

- Resolutions cannot place or suggest restrictions on the operation of the RRL project for flood risk management and other authorized purposes.
- Resolutions must be economically and environmentally feasible.
- Resolutions are limited by the availability of sufficient real property interests above 534' m.s.l. for property owners to relocate structures and septic systems.
- Resolutions cannot create a significant threat to human life, health, or safety.
- Resolutions must eliminate existing encroachments below 534' m.s.l. to the greatest extent practicable and in a timely and cost-effective manner, and reduce the likelihood of future encroachments.
- Resolutions are subject to all Federal policies, guidelines and regulations governing real estate encroachment resolution actions.

The below Real Estate Resolution Framework was developed by the USACE, incorporating the above six factors. For a recommendation to be advanced within an encroachment scenario, it must meet each of the below criteria of the Resolution Framework. The Real Estate criteria for this encroachment plan are:

- a. Recommendations cannot place or suggest any restriction on the operation of RRL for flood risk management and other authorized purposes, in accordance with ER 405-1-12. (See Appendix 1: Hydrology and Hydraulics – Impact of Structures within the Flowage Easement)
- b. Recommendations to release a Human Habitation Restriction, which will allow certain structures to remain in place, cannot appreciably affect the water storage capacity. (See Appendix 1: Hydrology and Hydraulics – Impact of Structures within the Flowage Easement)
- c. Recommendations cannot create appreciable negative impacts on the RRL Shoreline Management Plan, the Operations Management Plan or the Master Plan. These three plans are for management of the government owned fee lands at RRL. The Encroachment Resolution Plan addresses the U.S. acquired occasional flowage easements that grant the U.S. the right to occasionally place water on the properties and prohibit structures for human habitation. The RRL Shoreline Management Plan only addresses property owned in fee simple title by the U.S., and as a result, no appreciable impact to the Shoreline Management Plan is anticipated. The Operations Management Plan and the Master Plan, which do take into account project easement lands, will not be significantly impacted by the implementation of the Encroachment Resolution Plan. In the past, the flowage easement lands have been identified by the upper guide being of 534.0' m.s.l. The Encroachment Resolution Plan does not change the original intent. Any acquisition or disposal action taken in accordance with the Rough River Lake Encroachment Resolution Plan cannot significantly impact the total acres of flowage easement at RRL.

- d. Recommendations to release a Human Habitation Restriction can be made only under certain conditions: it can be demonstrated that the continued occupation of the site will not result in a significant threat to human life, health or safety; the continued occupation of the site will not place or suggest any restriction on the operation of the project; there is no practical alternative to removal of the habitable structure; there would be adequate warning time to evacuate the structure in the event of a flood event projected to flood inundate the site; and non-flooded access out of the area would be available for evacuation, including non-flooded egress out of the project area.
- e. In making recommendations, the level of risk in reference to habitable structures is determined by the relationship of the property location to the 527.4' m.s.l. reached during the 2011 record flood event and the upper guide of 534' m.s.l.
- f. Consistent with 32 C.F.R. § 204.3, OMB Circular A-25 (Revised), 31 U.S.C. § 9701, and Policy Guidance Letter No. 32 (See Exhibit G), USACE will charge administrative fees to grantees, to include the cost of deed drafting and surveying. These fees will be estimated by USACE and paid by the grantee prior to initiation of the real estate transaction. The grantee will only be responsible for administrative costs actually incurred by USACE for the transaction covering the grantee. Any remaining balance of estimated fees will be returned to the grantee.
- g. Using a "before-and-after" appraisal methodology, the value of the real estate interests conveyed to affected homeowners is anticipated to be low, with the cost of valuing the interests with an appraisal likely exceeding the value of the estate conveyed. Payment of Fair Market Value for the real estate interest is therefore waived. See 41 C.F.R. §102-75.937. This action will eliminate the need for an appraisal, thus substantially reducing the cost of the administrative fees charged to the grantee.
- h. All recommended resolutions will be executed in compliance with appropriate environmental laws and regulations. (See Section 6. Environmental Consideration and Compliance)
- i. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. § 4601 et seq.), commonly referred to as the Uniform Act, establishes the policy of fair and equitable treatment of persons displaced as a direct result of Federal programs or projects; the primary purpose is to ensure that displaced persons don't suffer disproportionate injuries as a result of programs and projects designed for the benefit of the public as a whole and to minimize the hardship of displacement (42 U.S.C. § 4621(b)). The Federal Highway Administration, a component agency of the U.S. Department of Transportation, has been identified as the lead Federal agency for implementation of the Uniform Act (50 Fed. Reg. 8953 (February 27, 1985); See also, 42 U.S.C. § 4633). The Federal Highway Administration has issued regulations implementing and interpreting the Uniform Act (49 C.F.R. §§ 24.1-24.603), which are available from their website at: http://www.fhwa.dot.gov/real_estate/uniform_act/. Some scenarios contemplated by the RRL Encroachment Resolution Plan could result in USACE undertaking actions pursuant to the Uniform Act. USACE policy and practice conform to the requirements of the Uniform Act, as implemented by regulation, and any potential benefits or advisory services provided at

RRL will be determined by whether the criteria outlined in the Uniform Act are satisfied. If the criteria for the Uniform Act are satisfied, USACE will notify impacted landowners.

j. Any efforts to resolve the flowage easement encroachments will be addressed concurrently with an approved Real Estate Acquisition Plan, detailed below.

8 Resolution Options and Possible Outcomes

The following Resolution Options were considered and rejected as unacceptable:

a. Do-nothing approaches for scenarios B through D were considered unacceptable. The outcomes for the do-nothing approaches are: 1) does not resolve currently problematic encroachments, 2) the number of encroachments will continue to grow, 3) a continuing increase in habitable structures in the flowage easement may eventually interfere with project operations, 4) risk of flooding and damage to personal property, depending on the location of the property, and 5) possible increase in risk to human health and safety. Due to the 2011 record flood, many property owners are now aware that their homes are located on Government-acquired flowage easements and are aware of the deed restriction.

b. Waivers for Consent to Easements were considered unacceptable. The outcomes for granting Consents are: 1) the habitable structures remain in the flowage easement, 2) may encourage additional encroachments, 3) monitoring would be difficult and an ongoing expense, requiring additional project staffing to monitor and maintain, 4) a continuing increase in habitable structures in the flowage easement may eventually interfere with project operations and, 5) risk of flooding and damage to personal property, depending on location of the property. In order for the District to issue Consents to Easement for habitable structures, a request through the chain of command would be required. In addition, consent will not be given and removal will be required for any structure or improvements that will be damaged by temporary flooding, will interfere with project operations, risk human health or safety, and are prohibited by the flowage easement deed.

c. Focusing on future encroachments only was considered and determined unacceptable. The outcomes for focusing on future encroachments only are: 1) does not resolve encroachments, 2) the habitable structures remain in the flowage easement, 3) may encourage additional encroachments, 4) risk of flooding and damage to personal property, 5) monitoring for new encroachments would be difficult and an ongoing expense and may require legal enforcement action.

The following Resolution Options were considered acceptable:

a. Disposal of Government's flowage easement rights was considered and determined acceptable under appropriate conditions. This approach is being implemented for habitable structures on flowage easements located completely above 534.0' m.s.l and not otherwise required to address backwater

effects should the affected landowners request a release of the flowage easement and pay the associated administrative fees to cover the costs of the release.

- b. Acquiring a real estate interest was considered and determined acceptable under appropriate conditions.
- c. Releasing the human habitation restriction for encroachments that meet specified criteria was considered and determined acceptable under appropriate conditions. This approach requires compliance with ER 405-1-12, Policy Guidance Letter No. 32 (See Exhibit G), and any other applicable Department of the Army policy.
- d. Requiring removal of encroachments infringing on Government fee property or flowage easements was considered and determined acceptable under appropriate conditions. This approach may require legal enforcement action.

9 Scenarios

To ensure that landowners are treated consistently throughout the flowage easement encroachment resolution process, the encroachments identified in the 2013, 2014, and 2015 surveys were analyzed utilizing the resolution criteria provided in Section 7. to develop resolution options and outcomes. As a result of this analysis, the flowage easement encroachments consistently fell into four scenarios, which are categorized as Scenarios A, B, C, and D. To facilitate understanding, each scenario includes an illustration of the type of encroachment to be addressed. The scenario descriptions, resolution options, recommendations and implementation steps are listed below.

9.1 Scenario A

Scenario A Description:

Habitable structure is on flowage easement and entire structure is above 534.0' m.s.l. (Approximately 209 encroachments of this type were identified by the 2013, 2014, and 2015 surveys.)

Recommendation:

Dispose of flowage easement rights above 534.0' m.s.l. to the underlying fee owner if requested by the individual landowner and the property is not required to address backwater effects.

Implementation: Scenario A concerns flowage easement areas above 534.0' m.s.l. where the flowage easement is not required to address backwater effects. Although current project operations only require easements up to 534.0' m.s.l., it is possible that during a historic flood event areas above 534.0 m.s.l. may flood. However, considering that RRL has not had a flood reach elevation 534.0' m.s.l., which amounts to a 220-year flood, the extinguishment of flowage easement rights carries low risk of adverse impacts, and creates a low risk to human life, health, and safety due to historical flood levels of less than 534.0' m.s.l.

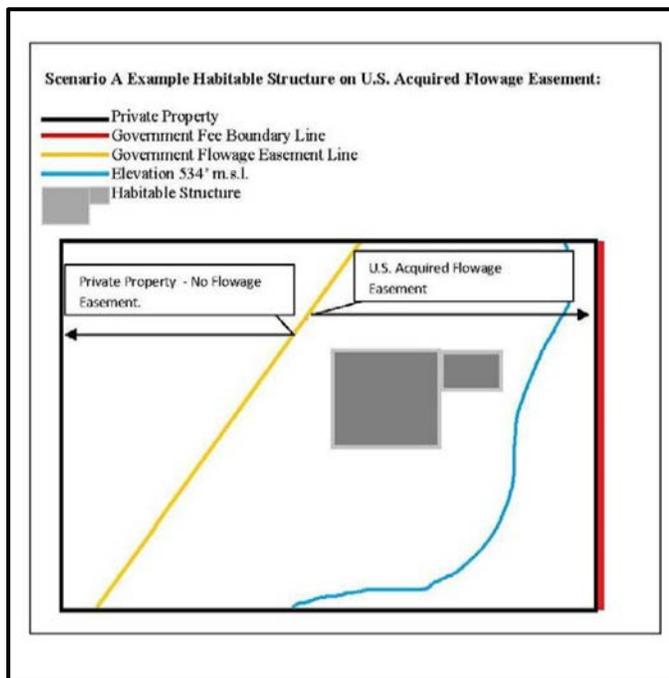


Figure 1 - Scenario A

As surveys are completed at RRL, the District will identify properties on government flowage easements and notify the landowners that they are on a flowage easement that is above the 220-year flood level and provide information on how to request the easement be extinguished for the area covering their property. Property owners who wish to have the flowage easement rights extinguished must pay the associated administrative fees for the District to process their request. The USACE Director of Real Estate will review any instruments extinguishing easement rights and will ensure that all necessary and appropriate requirements are addressed. Should an individual landowner choose not to pursue easement extinguishment, then the District will not take further action in the immediate future to enforce the flowage easement right through a removal action so long as the structure is entirely above 534' m.s.l.

Note: Flowage easements will not be disposed of above the 534.0' m.s.l. if property is required to address backwater effects, which are the rise in surface elevation of flowing water upstream from and

as a result of the presence of the project. In these areas, flowage easements may be disposed of above the 539.0' m.s.l. only.

9.2 Scenario B

Scenario B Descriptions:

Scenario B-1: Habitable structure is wholly on flowage easement with a portion of that structure below 534.0' m.s.l., and it appears all of the requirements for release of the human habitation restriction either are or could be met. (Approximately 90 encroachments of this type were identified by the 2013, 2014, and 2015 surveys.)

Scenario B-2: Habitable structure is wholly on flowage easement with a portion of that structure below 534.0' m.s.l., and it appears the requirements for release of the human habitation restriction cannot be met. (Approximately 4 encroachments of this type were identified in the 2013, 2014, and 2015 surveys.)

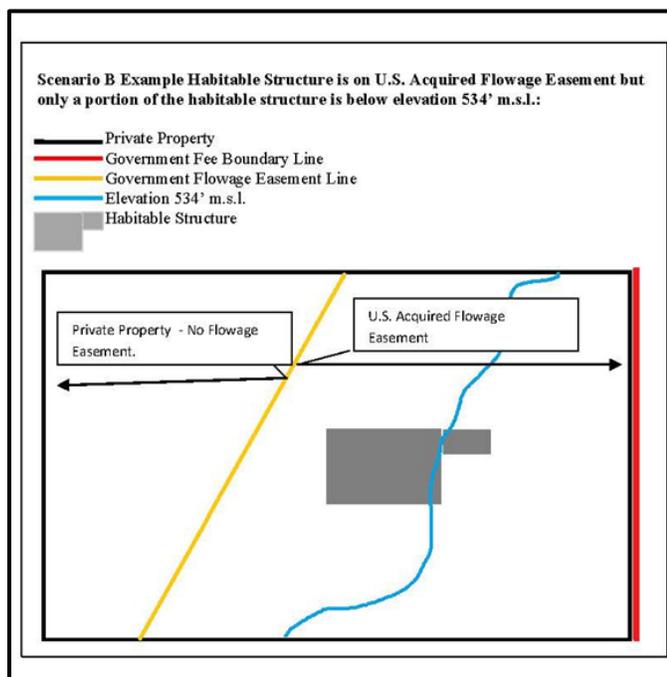


Figure 2 - Scenario B

Options:

1. Release the human habitation restriction for the portion of the structure below the 534.0' m.s.l. if all the requirements for release are met.
2. Enforce the terms of the easement by requiring removal of the entire structure or the portion of the structure below 534' m.s.l. where practical.
3. The Headquarters USACE Director of Real Estate exercises discretion not to remove the structure based on a conclusion that despite not meeting all human habitation release requirements, there is not a substantial risk to human life, health, or safety and will send an encroachment warning letter.

Recommendations:

Scenario B-1: Obtain a release through the chain of command of the human habitation restriction after a formal request from the landowner and confirmation of satisfaction of criteria for the release.

Scenario B-2: Enforce the terms of the easement by requiring removal of the entire structure or the portion of the structure below 534' m.s.l. where practical; or the Headquarters USACE Director of Real Estate may exercise discretion not to remove the structure based on a conclusion that despite not

meeting all human habitation release requirements, there is not a substantial risk to human life, health, or safety and will send an encroachment warning letter.

Implementation: As surveys are completed at RRL, the District will identify properties where a habitable structure is wholly on government easement lands and where a portion of that structure is below 534.0' m.s.l. When those properties are identified, the District will notify the landowner and provide information on how to request a release of the human habitation restriction and the criteria for such a release. After a receipt of a formal request for release of the human habitation restriction from landowners, and confirmation of satisfaction by the Headquarters (in consultation with the Division and District), the request will be processed for release of human habitation restriction.

Implementation of the option to release the human habitation restriction must meet the criteria of Policy Guidance Letter No. 32 (See Exhibit G). Additionally, compliance with all applicable laws and regulations, to include Executive Orders 11988 (Floodplain Management) and 13690 (Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input) is required.

Consistent with 32 C.F.R. § 204.3, OMB Circular A-25 (Revised), 31 U.S.C. § 9701, and Policy Guidance Letter No. 32 (See Exhibit G), USACE will charge administrative fees to grantees, to include the cost of deed drafting and surveying. These fees will be estimated by USACE and paid by the grantee prior to initiation of the real estate transaction. The grantee will only be responsible for administrative costs actually incurred by USACE for the transaction covering the grantee. Any remaining balance of estimated fees will be returned to the grantee.

Meeting the specified criteria is not a guarantee that the Government will release the human habitation restriction for any particular landowner. To obtain a release of the human habitation restriction, the request by the landowner must, at a minimum, demonstrate that:

- Continued occupation of the site will not result in a significant threat to human life, health or safety.
- Granting the release will not place or suggest any restriction on the operation of the project.
- Any request for non-removal of a human habitation structure in a floodplain or project pool must also demonstrate that there is no practical alternative to removal of the habitable structure.
- There would be adequate warning time to evacuate the structure in the event of a flood event projected to flood the site.
- Non-flooded access out of the area would be available for evacuation, including non-flooded egress out of the project area.

Any granted human habitation release will, at a minimum, contain the following restrictions:

- An indemnification and hold harmless clause releasing the Government of any and all liability associated with the flooding of the property.
- No modification of the structure outside the current building footprint is permissible, meaning that no modifications to the habitable structure are permitted that add any livable square footage.
- If the home is not reparable after a flood event, rebuilding of the structure is not permitted.
- Any other restriction considered appropriate by the District Commander.

If the property does not meet the requirements for a release of the human habitation restriction, and the voluntary removal of the residential structure is not possible, the Government may seek to enforce the rights provided to it under the flowage easement it acquired. The flowage easements at RRL provide the United States the right to periodically flood the property and prohibit habitable structures, among other rights. Through the United States Attorney's Office, the Government may avail itself of this option on a case-by-case basis. Implementation would not place or suggest any restriction on the operation of RRL for flood risk management and other authorized purposes.

Any homeowner that does not affirmatively request the partial release of the human habitation restriction within one year of receiving an encroachment notification letter or purchasing an impacted property may not be considered for relief, at the Headquarters USACE Director of Real Estate's discretion. A homeowner's unwillingness to pay the administrative fees will not affect this time limitation.

If, in the discretion of the Headquarters USACE Director of Real Estate, it is determined that the portion of the structure below 534.0' m.s.l. does not meet all the requirements for the release of a human habitation restriction, but nonetheless, does not pose a substantial risk to human life, health, or safety, the District will send an encroachment warning letter to the landowner, provided that the main floor elevation level of the home is at or above the elevation of 527.4' m.s.l., which is an approximately 50-year flood event, based on historic flood data. The letter will include the determination of the Headquarters USACE Director of Real Estate, the risks, and indicate that the landowner should cure any defects; the letter will also notify the landowner that if the portion of the structure below 534.0' m.s.l. is destroyed or seriously damaged, repair and rebuilding are not authorized. The letter will also remind the landowner continued use of the house is at his/her sole risk, and the Government assumes no liability of any nature for losses or damages which may occur through or by the operation of the Rough River Lake Project. The letter will inform landowners that if circumstances change or the District determines it necessary, future removal may be pursued, and any attempted reconstruction or expansion of the structure without prior written approval from USACE may necessitate prompt removal.

The recommended approach is estimated to resolve approximately 94 of the encroachments identified in the 2013, 2014, and 2015 surveys.

9.3 Scenario C

Scenario C Descriptions:

Scenario C-1: Habitable structure is wholly on flowage easement and wholly below 534.0' m.s.l., and it appears all of the requirements for release of the human habitation restriction either are or could be met. (Approximately 42 encroachments of this type were identified by the 2013, 2014, and 2015 surveys.)

Scenario C-2: Habitable structure is wholly on flowage easement and wholly below 534.0' m.s.l., and it appears the requirements for release of the human habitation restriction cannot be met. (Approximately 27 encroachments of this type identified by the 2013, 2014, and 2015 surveys.)

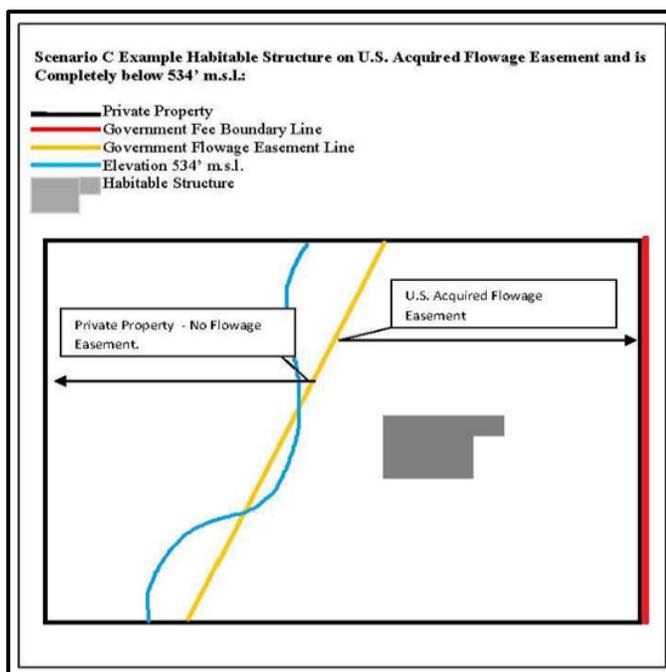


Figure 3 - Scenario C

Options:

1. Release the human habitation restriction if all requirements are met.
2. Enforce the terms of the easement by requiring removal of the entire structure.
3. The Headquarters USACE Director of Real Estate exercises discretion not to remove the structure based on a conclusion that despite not meeting all human habitation release requirements, there is not a substantial risk to human life, health, or safety and will send an encroachment warning letter.

Recommendations:

Scenario C-1: Release through the chain of command of the human habitation restriction after a formal request from the landowner and confirmation of satisfaction of criteria for the release.

Scenario C-2: Enforce the terms of the easement by requiring removal of the entire structure; or the Headquarters USACE Director of Real Estate may exercise discretion not to remove the structure based on a conclusion that despite not meeting all human habitation release requirements, there is not a substantial risk to human life, health, or safety and will send an encroachment warning letter.

Implementation: As surveys are completed at RRL, the District will identify properties where a habitable structure is wholly on government easement lands and wholly below 534.0' m.s.l. When those properties are identified, the District will notify the landowner and provide information on how to request a release of the human habitation restriction and the criteria for such a release. After a receipt

of a formal request for release of the human habitation restriction from landowners, and confirmation of satisfaction of the criteria by the Headquarters (in consultation with the Division and District), the request will be processed for release of human habitation restriction.

Implementation of the option to release the human habitation restriction must meet the criteria of Policy Guidance Letter No. 32 (See Exhibit G). Additionally, compliance with all applicable laws and regulations, to include Executive Orders 11988 (Floodplain Management) and 13690 (Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input) is required.

Consistent with 32 C.F.R. § 204.3, OMB Circular A-25 (Revised), 31 U.S.C. § 9701, and Policy Guidance Letter No. 32 (See Exhibit G), USACE will charge administrative fees to grantees, to include the cost of deed drafting and surveying. These fees will be estimated by USACE and paid by the grantee prior to initiation of the real estate transaction. The grantee will only be responsible for administrative costs actually incurred by USACE for the transaction covering the grantee. Any remaining balance of estimated fees will be returned to the grantee.

Meeting the specified criteria is not a guarantee that the Government will release the human habitation restriction for any particular landowner. To obtain a release of the human habitation restriction, the request by the landowner must, at a minimum, demonstrate that:

- Continued occupation of the site will not result in a significant threat to human life, health or safety.
- Granting the release will not place or suggest any restriction on the operation of the project.
- Any request for non-removal of a human habitation structure in a floodplain or project pool must also demonstrate that there is no practical alternative to removal of the habitable structure.
- There would be adequate warning time to evacuate the structure in the event of a flood event projected to flood the site
- Non-flooded access out of the area would be available for evacuation, including non-flooded egress out of the project area.

Any granted human habitation release will, at a minimum, contain the following restrictions:

- An indemnification and hold harmless clause releasing the Government of any and all liability associated with the flooding of the property.
- No modification of the structure outside the current building footprint is permissible.
- If the home is not reparable after a flood event, rebuilding of the structure is not permitted.

- Any other restriction considered appropriate by the District Commander.

Any homeowner that does not initiate the request for release of the human habitation restriction within one year of receiving an encroachment notification letter or purchasing an impacted property may no longer request this relief, at the Headquarters USACE Director of Real Estate's discretion. A homeowner's unwillingness to pay the administrative fees will not affect this time limitation.

If the property does not meet the requirements for a release of the human habitation restriction, and the voluntary removal of the residential structure is not possible, the Government may seek to enforce the rights provided to it under the flowage easement it acquired. The flowage easements at RRL provide the United States the right to periodically flood the property and prohibit habitable structures, among other rights. Through the United States Attorney's Office, the Government may avail itself of this option on a case-by-case basis. Implementation would not place or suggest any restriction on the operation of RRL for flood risk management and other authorized purposes.

If, in the discretion of the Headquarters USACE Director of Real Estate, it is determined that the structure does not meet all the requirements for the release of a human habitation restriction, but nonetheless, does not pose a substantial risk to human life, health, or safety, the District may send an encroachment warning letter to the landowner, provided that the main floor elevation level of the home is at or above the elevation of 527.4 m.s.l., which is an approximately 50-year flood event, based on historic flood data. The letter will include the determination of the Headquarters USACE Director of Real Estate, the risks, and indicate that the landowner should cure any defects; the letter will also notify the landowner that if the structure is destroyed or seriously damaged, repair and rebuilding are not authorized. The letter will also remind the landowner continued use of the house is at his/her sole risk, and the Government assumes no liability of any nature for losses or damages which may occur through or by the operation of the Rough River Lake Project. The letter will inform landowners that if circumstances change or the District determines it necessary, future removal may be pursued, and any attempted reconstruction or expansion of the structure without prior written approval from USACE may necessitate prompt removal.

The recommended approach is estimated to resolve approximately 69 of the encroachments identified in the 2013, 2014, and 2015 surveys.

9.4 Scenario D

Scenario D Descriptions:

Scenario D-1: Habitable structure is partially on flowage easement and wholly below 534.0' m.s.l., and it appears all of the requirements for release of the human habitation restriction either are or could be met. (Approximately 40 encroachments of this type were identified by the 2013, 2014, and 2015 surveys.)

Scenario D-2: Habitable structure is partially on flowage easement and wholly below 534.0' m.s.l., and it appears the requirements for release of the human habitation restriction cannot be met. (Approximately 4 encroachments of this type were identified by the 2013, 2014, and 2015 surveys.)

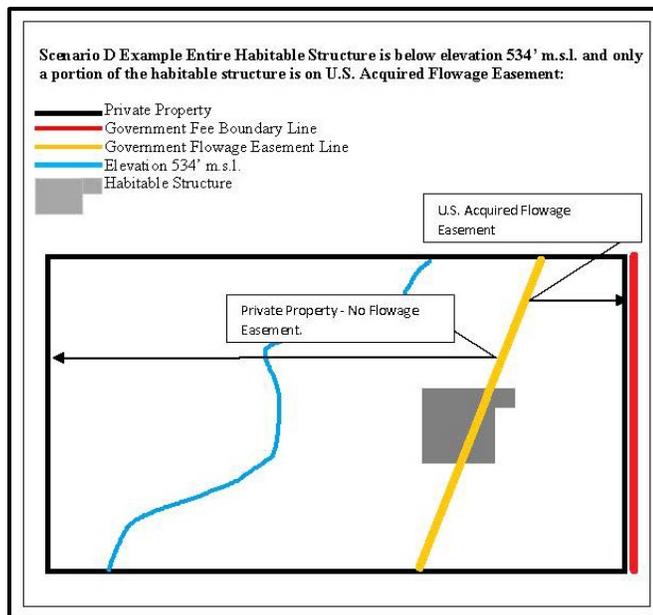


Figure 4 - Scenario D

Options:

1. Release the human habitation restriction on the portion of the structure on Government easement lands if all requirements are met. Concurrently, acquire any necessary real estate rights for Federal project operations, consistent with the Real Estate Acquisition Plan (See Section 11).
2. Enforce the terms of the easement by requiring removal of the portion of the structure on Government easement and paying any additional just compensation for the portion of the structure remaining as may be appropriate.
3. The Headquarters USACE Director of Real Estate exercises discretion not to remove the structure based on a conclusion that despite not meeting all human habitation release requirements, there is not a substantial risk to human life, health, or safety and will send an encroachment warning letter. Concurrently, acquire any necessary real estate rights for Federal project operations, consistent with the Real Estate Acquisition Plan (See Section 11).
4. The District acquires additional real estate interest.

Recommendations:

Scenario D-1: Release through the chain of command of the human habitation restriction of the portion of the structure on a Government easement after a formal request from the landowner and confirmation of satisfaction of criteria for the release. Concurrently, acquire any necessary real estate rights for Federal project operations, consistent with the Real Estate Acquisition Plan (See Section 11).

Scenario D-2: Upon approval by the ASA(CW), enforce the terms of the easement by requiring removal of the portion of the structure on the Government easement where practical and paying any additional just compensation for the portion of the structure remaining, as may be appropriate; or the Headquarters USACE Director of Real Estate may exercise discretion not to remove the structure based on a conclusion that despite not meeting all human habitation release requirements, there is not a substantial risk to human life, health, or safety and will send an encroachment warning letter. Concurrently, acquire any necessary real estate rights for Federal project operations, consistent with the Real Estate Acquisition Plan (See Section 11).

Implementation: As surveys are completed at RRL, the District will identify properties where a habitable structure is partially on government easement lands and wholly below 534.0' m.s.l. When those properties are identified, the District will notify the landowner and provide information on how to request a release of the human habitation restriction and the criteria for such a release. After a receipt of a formal request for release of the human habitation restriction from landowners, and confirmation of satisfaction of the criteria by the District, the request will reported to the chain-of-command for release of human habitation restriction.

Implementation of the option to release the human habitation restriction must meet the criteria of Policy Guidance Letter No. 32 (See Exhibit G). Additionally, compliance with all applicable laws and regulations, to include Executive Orders 11988 (Floodplain Management) and 13690 (Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input) is required.

Meeting the specified criteria is not a guarantee that the Government will release the human habitation restriction for any particular landowner. To obtain a release of the human habitation restriction, the request by the landowner must, at a minimum, demonstrate that:

- Continued occupation of the site will not result in a significant threat to human life, health or safety.
- Granting the release will not place or suggest any restriction on the operation of the project.
- Any request for non-removal of a human habitation structure in a floodplain or project pool must also demonstrate that there is no practical alternative to removal of the habitable structure.
- There would be adequate warning time to evacuate the structure in the event of a flood event projected to flood the site
- Non-flooded access out of the area would be available for evacuation, including non-flooded egress out of the project area.

Any granted human habitation release will, at a minimum, contain the following restrictions:

- An indemnification and hold harmless clause releasing the Government of any and all liability associated with the flooding of the property.
- No modification of the structure outside the current building footprint is permissible.
- If the home is not reparable after a flood event, rebuilding of the structure is not permitted.
- Any other restriction considered appropriate by the District Commander.

Any homeowner that does not initiate the request for release of the human habitation restriction within one year of receiving an encroachment notification letter or purchasing an impacted property may no longer request this relief, at the Headquarters USACE Director of Real Estate's discretion. The unwillingness of a homeowner to pay administrative fees will not affect this time limitation.

If the property does not meet the requirements for a release of the human habitation restriction, and the voluntary removal of the residential structure is not possible, the Government may seek to enforce the rights provided to it under the flowage easement it acquired. The flowage easements at Rough River provide the United States the right to periodically flood the property and prohibit habitable structures, among other rights. Due to the structure being only partially on Government easement lands, such enforcement may also require just compensation for impacts to the portion of the structure not on Government lands. Through the United States Attorney's Office, the Government may avail itself of this option on a case-by-case basis. Implementation would not place or suggest any restriction on the operation of RRL for flood risk management and other authorized purposes.

If, in the discretion of the Headquarters USACE Director of Real Estate, it is determined that the structure does not meet all the requirements for the release of a human habitation restriction, but nonetheless, does not pose a substantial risk to human life, health, or safety, the District may send a warning encroachment letter to the landowner. The letter will include the determination of the Headquarters USACE Director of Real Estate, the risks, and indicate that the landowner should cure any defects; the letter will also notify the landowner that if the portion of the structure on Government easement is destroyed or seriously damaged, repair and rebuilding are not authorized. The letter will inform landowners that if circumstances change or the District determines it necessary, future removal may be pursued.

The District may pursue acquisition of real property interests in limited circumstances; such acquisitions would be determined and coordinated with the chain of command.

The recommended approach is estimated to resolve approximately 44 of the encroachments identified in the 2013, 2014, and 2015 surveys.

10 Summary of USACE Recommended Resolutions

No individual recommended resolution option will address all of the encroachment scenarios at RRL. Therefore, the USACE recommends appropriate combined application of the options to the various scenarios to address the encroachments based on site-specific circumstances:

Scenario A - Habitable structure is on flowage easement, the entire structure is above the 534.0' m.s.l., and easements above this elevation are not otherwise required to address backwater effects.

- Recommended action: Dispose of flowage easement rights above 534.0' m.s.l. to the underlying fee owner if requested by the individual landowner and the property is not required to address backwater effects. This is estimated to resolve approximately 209 of the 416 encroachments identified by the 2013, 2014, and 2015 surveys.

Scenario B-1 - Habitable structure is wholly on flowage easement with only a portion of that structure below 534.0' m.s.l.

- Recommended action: Release of the human habitation restriction for habitable structures that meet the requirements outlined above. This is estimated to resolve approximately 90 of the 416 encroachments identified by the 2013, 2014, and 2015 surveys.

Scenarios B-2 & C-2 - Habitable structure is wholly on flowage easement, and the habitable structure is either wholly or partially below 534.0' m.s.l. and does not meet the requirements for the release of the human habitation restriction.

- Recommended action: Enforce the terms of the easement by requiring removal of the entire structure or the portion of the structure below 534' m.s.l. where practical; or the Headquarters USACE Director of Real Estate may exercise discretion not to remove the structure based on a conclusion that despite not meeting all human habitation release requirements, there is not a substantial risk to human life, health, or safety and will send an encroachment warning letter. This is estimated to resolve approximately 31 of the 416 encroachments identified by the 2013, 2014, and 2015 surveys, depending on individual circumstances.

Scenarios C-1 & D-1 - Habitable structure is wholly or partially on flowage easement and is below 534.0' m.s.l.

- Recommended action: Release of the human habitation restriction for habitable structures that meet the requirements outlined above. Concurrently, acquire any necessary real estate rights for Federal project operations, consistent with the Real Estate Acquisition Plan (See Section 11). This is estimated to resolve approximately 82 of the 416 encroachments identified by the 2013, 2014, and 2015 surveys.

Scenario D-2 - Habitable structure is partially on flowage easement and is wholly below 534.0' m.s.l. and does not meet the requirements for release of the human habitation restriction.

- Recommended action: Enforce the terms of the easement by requiring removal of the portion of the structure on Government easement and paying any additional just compensation for the portion of the structure remaining as may be appropriate; or the Headquarters USACE Director of Real Estate may exercise discretion not to remove the structure based on a conclusion that despite not meeting all human habitation release requirements, there is not a substantial risk to human life, health, or safety and will send an encroachment warning letter. Concurrently, acquire any necessary real state rights for Federal project operations, consistent with the Real Estate Acquisition Plan (See Section 11). This is estimated to resolve approximately 4 of the 416 encroachments identified by the 2013, 2014, and 2015 surveys.

11 Real Estate Acquisition Plan

During recent surveying, USACE became aware that flowage easements were not acquired up to the 534.0' m.s.l. throughout the entire project as intended; and in many areas, flowage easements were acquired above the 534.0' m.s.l. Furthermore, fee simple was not always acquired up to 514.0' m.s.l. as was originally authorized.

No later than one year after the ASA(CW)'s approval of this plan, USACE will submit a Real Estate Acquisition Plan for ASA(CW) approval. Prior to approval of the Real Estate Acquisition Plan, USACE is only authorized to execute Scenarios A, B and C of this Plan. As part of this Acquisition Plan, USACE will propose acquisition timelines and detailed cost projections that prioritize areas that are perpetually inundated by the ordinary pool elevation or otherwise considered to be of particularly high risk of flooding.

The Real Estate Acquisition Plan will be a collaborative, vertically coordinated project document. It will include experts in planning, operations, real estate, and legal counsel as part of the project delivery team.

12 Implementation Sequence of Events

As a result of the 2013, 2014, and 2015 Rough River Lake flowage easement surveys, 416 encroachments were identified; surveying is ongoing and additional encroachments are likely to be identified as a result thereof. To resolve these encroachments and create a process to consistently resolve the encroachment problem at RRL, resolution implementation will be undertaken as follows:

Flowage easement encroachment resolution for Scenarios A, B and C will begin upon the approval of this plan. Per the Real Estate Acquisition Plan section, implementation of Scenario D will take place after the Acquisition Plan is approved.

Properties will be reviewed and compared against the scenarios for habitable structure encroachments. Resolution of each encroachment will be based upon the applicable scenario, consistently applied and processed individually, on a case-by-case basis to ensure fair treatment of all affected property owners. Actual field surveys will continue to be obtained to identify the Government boundary line, flowage easement line and to identify the encroachments. The application of GIS technologies will be used to manage the flowage easement boundary and prevent future encroachments once the flowage easement boundaries have been identified by traditional surveying methods. (See Appendix 2: GIS vs. Surveys to Identify Flowage Easement Encroachments at Rough River Lake)

Action will be initiated to resolve the habitable structure encroachments identified in the 50.01 miles already surveyed that fall into Scenarios B and C. The completed surveys were conducted in areas that had a high degree of residential development compared to the remainder of the project. In order for the survey results to be as impactful as possible, future surveys will be done in manageable increments, with priority given to those areas with active development. An additional 85 miles of flowage easement is being surveyed in 2016, which will complete the survey of areas currently developed or being developed. The remaining miles (less populated areas consisting of farms and wooded areas) of flowage easement will be surveyed with available Operation and Maintenance (O&M) funding.

Any encroachments identified by surveying will proceed to resolution in the same manner recommended for the resolution of the initial 416 habitable structure encroachments to ensure landowners are treated fairly and resolutions are applied consistently throughout the project.

The time estimated to address each individual encroachment is estimated to be approximately 2 to 4 years from the time the encroachment is identified. As future surveys are completed and additional encroachments identified within already surveyed areas, it is estimated to take 10 to 20 years to fully resolve the habitable structure encroachments at RRL.

Implementation of these recommendations is subject to the availability of funds. Nothing in this document shall constitute, or be deemed to constitute, an obligation of future appropriations by the United States or imply that Congress will appropriate funds to implement these recommendations. This plan and its recommendations do not constitute a final agency action or determination concerning any individual encroachment at RRL or any other USACE project.

13 Organizational Responsibilities

ER 405-1-12, Chapter 8, Paragraph 8-4. Organizational Responsibility for Civil Works Real Property. Within the Corps, administration of Civil Works Real property will involve consultation and coordination

among field elements. The references to Operations and Readiness Division are intended to include both the district and project elements.

Paragraph 8-4, Sub-Paragraph c. Operations and Readiness Division is responsible for on-site physical management and stewardship of all project lands and renewable natural resources. The Shoreline Management Plan is updated every 5 years. The Operations Management Plan is updated as needed in accordance with the Master Plan.

Paragraph 8-4, Sub-Paragraph h. The District Real Estate Division is responsible for resolving all land title disputes, claims involving damage to real estate or arising under outgrants, boundary disputes and actions involving encroachments, and for coordination of such actions with the Operations element and other district elements as necessary.

Office of Counsel will be the lead on all litigation and will prepare all deeds and closing documentation.

14 Communication Strategy

This resolution plan communicates to our stakeholders the encroachments identified by the 2013, 2014, and 2015 surveys and the immediate actions the District will implement and continues resolution of the identified encroachments. Audiences for this communication strategy include, but are not limited to:

- Affected and potentially affected property owners
- Division and District team members
- Congressional Interests
- State and County Government
- Local Municipalities
- Real Estate Agencies
- Media Outlets
- General Public

This resolution plan will be distributed for public release. Notice of this public release will be circulated in local print publications.

15 Procedure to Prevent Future Encroachments

The RRL Project Manager will continue to meet with land developers and local real estate agencies to make them aware of the constraints and location of the flowage easements. As the flowage easement is surveyed and encroachments are identified, the owners of encroaching structures will be sent a

moratorium letter signed by the District Commander (See Exhibit F). The RRL Project Manager will meet with each encroaching landowner with a structure located below 534.0' m.s.l. identified in the USACE survey to explain the flowage easement, identify the land owner's responsibilities, and discuss options for resolution of the encroachment.

The RRL Project Manager and staff will diligently monitor the surveyed areas in an effort to identify and prevent any new construction before it begins. This task will become easier for the project to accomplish as the flowage easement line becomes established at 534.0' m.s.l. The RRL Project Manager and staff will also monitor the entire 319.8 miles of flowage easement area for any new developments, and upon observation of new construction, issue a cease and desist letter, make contact with the landowner to explain the flowage easement, identify the flowage easement, require the removal of any structure and address the landowner's responsibilities in regard to compliance with the terms of the easement. An enforcement recommendation will be sent to the District Office of Counsel for the purposes of initiating a referral to the U.S. Attorney's Office for any encroachment resolution that cannot be attained in the absence of court action.

The RRL Project Manager will provide copies of the surveys and work with the local health departments and utilities in an effort to ensure no new utilities are installed below elevation 534.0' m.s.l. and to require removal of any system that poses a risk to human health or safety.

Continued communication and surveillance will be essential to prevent future encroachments. Frequent communication with local land owners, real estate agencies, congressional representatives, developers, utilities, and county health departments will be instrumental in the prevention and resolution process. The RRL Project Manager will release quarterly news bulletins and letters that inform the community about flowage easements and associated restrictions. As frequently as practical, the RRL Project Manager will educate the public on the flowage easements and completed surveys via social media.

The RRL Project Manager and staff have existing working relationships with local utilities and health departments. As a result, currently any new potential utility customers or health department permittees in the RRL project area must obtain a statement from the RRL Project Manager that indicates the serviced structure is not located within the Government's flowage easement. This statement must be obtained prior to the service or permit being issued.

Enforcement of flowage easements will be ongoing at RRL. However, through regular communication and surveillance, USACE anticipates being able to maintain compliance after the initial surveys have been completed and resolutions have been implemented.

Exhibit A

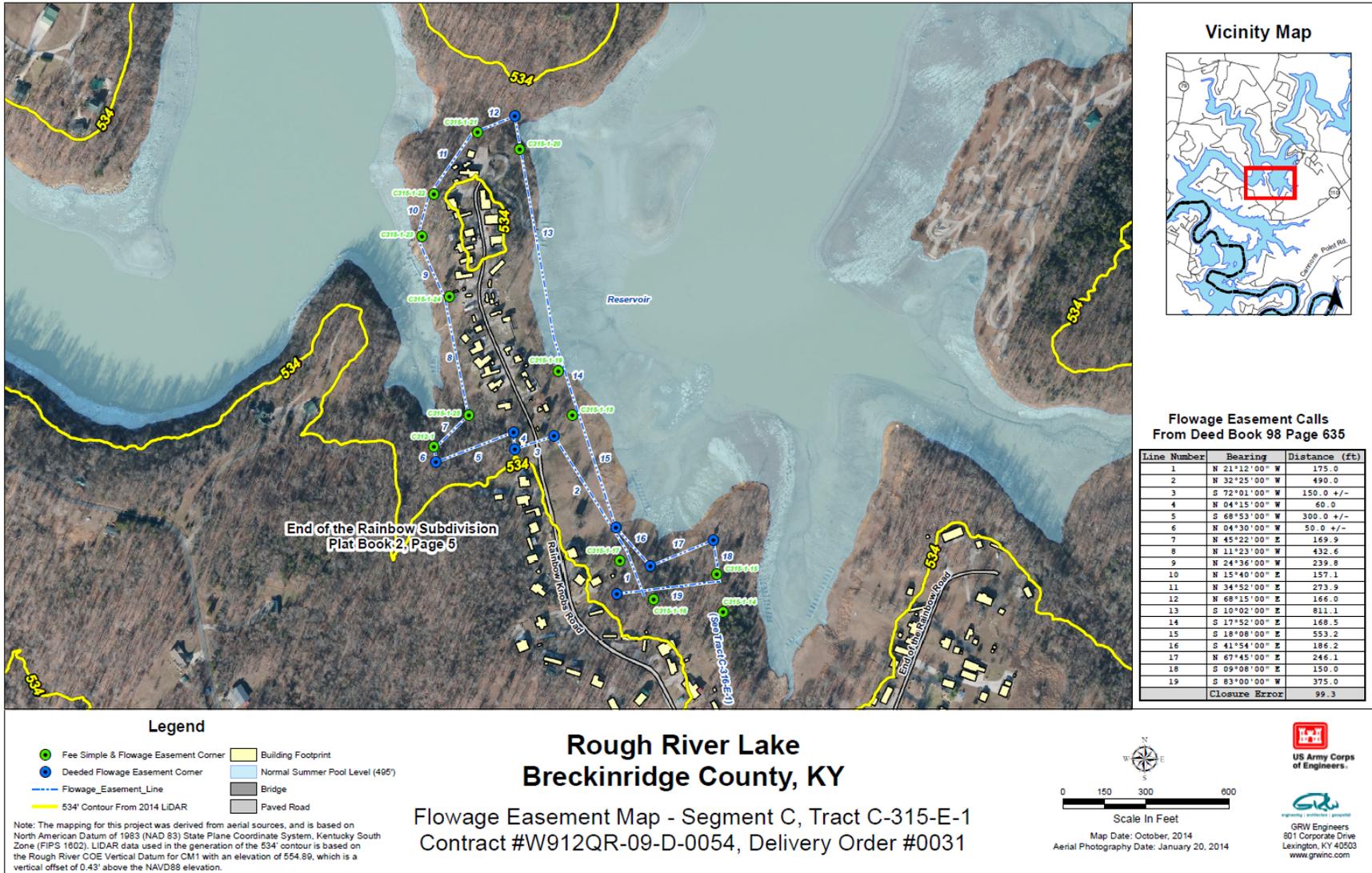


Exhibit A-1

DOCUMENTARY STAMPS \$0.55

Rough River Reservoir, Ky., Project
Tract(s) No.(s) C-313-B-1 & C-313-B-2

WARRANTY DEED OF FLOWAGE EASEMENT

THIS WARRANTY DEED OF FLOWAGE EASEMENT made and entered into this 29th
day of December 1958 by and between FRANCES LILLIAN RHODES, a widow,
MARY E. RHODES, single, WILLIAM RHODES, single, JONNIE RHODES, single, FRANCIS
RHODES and MARGARET RHODES, his wife, MONNIE O'DONOGHUE and STAFFORD O'DONOGHUE,
her husband, and JANE CARR and ARMY B. CARR, her husband,

parties of the first part, and THE UNITED STATES OF AMERICA, party of the second
part,

WITNESSETH

That for and in consideration of the sum of FOUR HUNDRED TWENTY-FIVE and NO/100 --

..... Dollars (\$ 425.00)

this day paid by the party of the second part to the parties of the first part,
the receipt of which is hereby acknowledged, the parties of the first part do
hereby GRANT, BARGAIN, SELL AND CONVEY unto the party of the second part, and
its assigns, the perpetual right, power, privilege and easement occasionally
to overflow, flood and submerge the land hereinafter described, and the right
to maintain mosquito control over said land in connection with the Rough River
Reservoir Project as authorized by the Act of Congress approved June 28, 1938
(Public Law 761 - 75th Congress) together with all right, title and interest
in and to the structures and improvements now situate on the land; excepting

Exhibit A-1

and the right to clear and remove any brush, debris, and natural obstructions which, in the opinion of the representative of the United States in charge of the project, may be detrimental to the project; provided that no structures for human habitation shall be constructed or maintained on the lands and provided further that no structures of other types except farm fences shall be constructed or maintained on the lands except as may be approved in writing by the representative of the United States in charge of the project; reserving, however, to the owners of the lands, their heirs and assigns, all such rights and privileges as may be used and enjoyed without interfering with or abridging the rights and easement hereby conveyed.

C 315 E 1
C 315 E 2

Rough River Reservoir, Ky., Project
Tract(s) No.(s) C-315-E-1 & C-315-E-2

The land over which said easement is conveyed is designated as Tract(s)
No.(s) C-315-E-1 and C-315-E-2 of the Rough River, Kentucky Project,
more particularly described as follows:

TRACT NO. C-315-E-1

Situate in the State of Kentucky, County of Breckinridge, on the right bank of Rough River, approximately 2.0 miles east of the intersection of Kentucky State Highways Nos. 110 and 63, 3.0 miles west of Madanials, Kentucky, and more particularly described as follows:

Beginning at a point in the north boundary line of Francis and William Rhodes, said point being N 03° 00' 00" E 450.0 feet, more or less, from the northwest corner of the Francis and William Rhodes tract in the Walter Salmon line; thence covering the land of William A. Rhodes as follows:

Exhibit A-1

N 21° 12' 00" W 173.0 feet

N 32° 25' 00" W 490.0 feet

S 72° 01' 00" W 150.0 feet, more or less, to a point in the east boundary of Walter Salzon; thence

N 04° 15' 00" W 60.0 feet, to a corner with Salzon; thence

S 62° 33' 00" W 300.0 feet, more or less, to a corner with Salzon; thence

N 04° 30' 00" W 50.0 feet, more or less, to a hub in Salzon's east line; thence severing the property of William A. Rhodes as follows:

N 43° 32' 00" E 169.9 feet

N 11° 23' 00" W 432.6 feet

N 24° 36' 00" W 239.6 feet

N 15° 46' 00" E 157.1 feet

N 34° 32' 00" E 273.9 feet

(Continued on Page 2a)

The parties of the first part agree that the easement herein granted shall include all right, title and interest which they have or may have in the banks, beds and waters of any stream opposite to or fronting upon said land, and in any alleys, roads, streets, ways, strips, gores, or railroad rights of way abutting or adjoining said land, and in any means of ingress and egress appurtenant thereto; together with the further right to go upon said land above described from time to time as the occasion may arise and remove therefrom natural and artificial structures or obstructions, including timber and other natural growths and any other obstructions, growths, accumulations, brush, trash, filth, or any other thing, which in the opinion of the duly authorized representative of the United States in charge, may be detrimental to the operation and maintenance of said project.

Excepting and reserving to the parties of the first part the right to remove _____

Exhibit A-1

Rough River Reservoir, Ky., Project
Tract(s) No.(s) C-315-S-1 & C-315-S-2

S 68° 15' 00" E 166.0 feet

S 10° 02' 00" E 611.1 feet

S 17° 52' 00" E 160.3 feet

S 16° 08' 00" E 553.2 feet

S 41° 34' 00" E 186.2 feet

N 67° 45' 00" E 246.1 feet

S 09° 08' 00" E 150.0 feet, to a hub in the north line of the Francis and William Rhodes property; thence

S 33° 00' 00" W 373.0 feet, more or less, to the point of beginning, containing 12.55 acres, more or less.

The above tract being a part of the same land as that described in a deed from Thomas H. and Bernice Rhodes to William A. Rhodes, dated October 1, 1920, recorded in Deed Book 69, Page 146; another deed from Green Brothers (William, Robert, and Preston), to W. A. Rhodes, dated April, 1936, recorded in Deed Book 75, Page 620; another deed from R. B. and Z. A. Porter to W. A. Rhodes, dated December 13, 1934, recorded in Deed Book 77, Page 244; another deed from Walter S. Ward and Daisy Ward to William A. Rhodes, dated February 4, 1919, recorded in Deed Book 67, Page 134; another deed from W. H. and Eula Copton, to W. A. Rhodes, dated April 15, 1923, recorded in Deed Book 72, Page 127; another deed from J. A. and Lillie Chascock to W. A. Rhodes, dated April 30, 1919, recorded in Deed Book 66, Page 489; all of said deeds being of record in the records of Breckinridge County, State of Kentucky; and Affidavit of Heirship of William A. Rhodes dated 21 October 1957, recorded in Deed Book _____, Page _____; and Affidavit of Heirship of Florence Rhodes dated 21 October 1957, recorded in Deed Book _____, Page _____, all in the records of Breckinridge County, Kentucky.

TRACT NO. C-315-S-2

Situate in the State of Kentucky, County of Breckinridge, on the right bank of Rough River, 2.0 miles west of the intersection of Kentucky State Highways Nos. 110 and 65, approximately 2.0 miles west of McDaniel, Kentucky, and more particularly described as follows:

Exhibit A-1

Beginning at a hub in the southwest boundary of the Essie Webster tract, said hub being $N 54^{\circ} 21' 00'' W 900.0$ feet, more or less, from the corner common to Essie Webster and Mrs. Olin Kouss; thence covering the land of William A. Rhodes as follows:

$S 34^{\circ} 30' 00'' E 750.0$ feet

$S 29^{\circ} 32' 00'' E 775.0$ feet

$S 77^{\circ} 25' 00'' E 390.0$ feet

$E 65^{\circ} 07' 00'' E 340.0$ feet

$E 50^{\circ} 10' 00'' E 350.0$ feet

$E 37^{\circ} 14' 00'' E 375.0$ feet

$N 49^{\circ} 00' 00'' E 335.0$ feet, to a point in the Essie Webster east boundary line; thence

$S 54^{\circ} 21' 00'' E 90.0$ feet, along the Webster line to a corner common to Kouss and William Rhodes; thence along the north Kouss boundary

$S 40^{\circ} 50' 00'' W 700.0$ feet

$S 11^{\circ} 25' 00'' E 425.0$ feet, to a hub; thence covering the land of William Rhodes as follows:

2a

(Continued on Page 2b)

Rough River Reservoir, Ky., Project
Tract (a) No. (c) C-315-B-1 & C-315-B-2

/ $S 32^{\circ} 47' 00'' W 805.0$ feet

$S 58^{\circ} 05' 00'' W 690.0$ feet

$S 46^{\circ} 45' 00'' W 460.0$ feet

$N 43^{\circ} 00' 00'' W 350.0$ feet

Exhibit A-1

N 69° 33' 00" W 273.0 feet

S 19° 10' 00" W 228.0 feet

S 22° 59' 00" W 50.0 feet, more or less, to a hub in the north boundary of the Francis and William Rhodes property; thence

S 85° 00' 00" W 250.0 feet, more or less, along the Rhodes line to a hub; thence covering the property of William A. Rhodes as follows:

N 18° 30' 00" E 50.0 feet

N 31° 01' 00" E 448.4 feet

S 69° 30' 00" E 236.8 feet

S 36° 21' 00" E 494.5 feet

N 39° 02' 00" E 368.0 feet

N 43° 25' 00" E 713.0 feet

S 82° 05' 00" W 433.2 feet

N 88° 31' 00" W 258.3 feet

N 62° 36' 00" W 143.4 feet

N 17° 42' 00" W 164.3 feet

N 23° 25' 00" E 792.6 feet

N 41° 29' 00" E 1012.1 feet, to a hub in the Dennis Webster line; thence

S 54° 21' 00" E 100.0 feet, more or less, to the point of beginning, containing 20.55 acres, more or less.

The above tract being a part of the same land as that described in a deed from Thomas H. and Service Rhodes to William A. Rhodes, dated October 1, 1929; recorded in Deed Book 68, Page 146; a deed from Green Brothers to W. A. Rhodes, dated April, 1936, recorded in Deed Book 78, Page 680; a deed from E. B. and E. A. Porter to W. A. Rhodes, dated December 13, 1934, recorded in Deed Book 77, Page 244; a deed from Walter A. and Daisy D. Ward to William A. Rhodes, dated February 4, 1919, recorded in Deed Book 67, Page 534; a deed from W. H. and Rula Compton to W. A. Rhodes, dated April 13, 1925, recorded in Deed Book 72, Page 137; and a deed from J. A. and Lullie Glasscock to W. A. Rhodes, dated April 30, 1918, recorded in Deed Book 66, Page 489; all recorded in Meckleridge County, State of Kentucky; also Affidavit of Heirship of William A. Rhodes dated 21 October 1917, recorded in Deed Book 60, Page 175; and Affidavit of Heirship of Florence Rhodes dated 21 October 1917, recorded in Deed Book 60, Page 175; all in the records of Meckleridge County, Kentucky.

Tracts Nos. C-313-S-1 and C-313-S-2, described above, contain a total of 33.10 acres, more or less, Rough River Reservoir, Kentucky.

Exhibit A-1

Rough River Reservoir, Ky., Project
Tract(s) No.(s) C-311-2-1 & C-311-2-2

on or before _____, 19____. In the event that the said buildings and improvements are not removed on or before said date, the right of removal shall terminate automatically, and the party of the second part shall have a good and indefeasible title to said buildings or improvements, without notice to the parties of the first part.

It is the intention of the parties of the first part, and they hereby agree that the payment of the above specified purchase price shall liquidate in full all past, present and future damages to the above described land that have occurred or may hereafter occur from the overflow or otherwise resulting from the operation of said project, and from the exercising of the rights, powers, privileges, and of the easement herein conveyed, and to whatever fee

or interest, if any, which the parties of the first part own in the land lying and being within the present boundaries of any public roads, highways, rights of way, strips or gores abutting or adjoining the land hereinbefore described and to the appurtenances and improvements thereunto belonging.

It is further understood and agreed that the estate described above is conveyed under and subject to all existing easements for public roads and highways, public streets, public utilities, railroads and pipe lines.

Subject also to all reservations, exceptions, and any other outstanding rights contained in or referred to in patents issued by the United States.

TO HAVE AND TO HOLD the above described lands to the extent of the interest conveyed herein, together with all rights and appurtenances thereunto belonging unto the UNITED STATES OF AMERICA and its assigns forever.

And the parties of the first part, for themselves and their heirs, do hereby

Exhibit A-1

covenant with the party of the second part that they are lawfully seized of the premises aforesaid; that the premises are free and clear from all encumbrances whatsoever; and they will warrant and defend the same, with the appurtenances, unto the party of the second part against the lawful claims of all persons whomsoever, except as hereinbefore noted.

IN TESTIMONY WHEREOF, the parties of the first part hereunto subscribe their names on the day and year first above-mentioned.

/s/ Frances Lillian Rhodes

FRANCES LILLIAN RHODES

/s/ Jemie Rhodes

JEMIE RHODES

/s/ Mary E. Rhodes

MARY E. RHODES

/s/ Monnie O'Donoghue

MONNIE O'DONOGHUE

/s/ William Rhodes

WILLIAM RHODES

/s/ Stafford O'Donoghue

STAFFORD O'DONOGHUE

Long Haver Reservoir, Ky., Project
Tract(s) No. (s) C-311-2-1 & C-311-2-2

/s/ Francis Rhodes

FRANCIS RHODES

/s/ Jane Carr

JANE CARR

/s/ Margaret Rhodes

MARGARET RHODES

/s/ Arney B. Carr

ARNEY B. CARR

Exhibit A-1

Rough River Reservoir, Ky., Project
Tract(s) No.(s) 6-313-2-1 & 6-313-2-2

CERTIFICATE

STATE OF KENTUCKY)
) SS
COUNTY OF BRICKINRIDGE)

I, Howard E. Meixner, a Notary Public in and for the

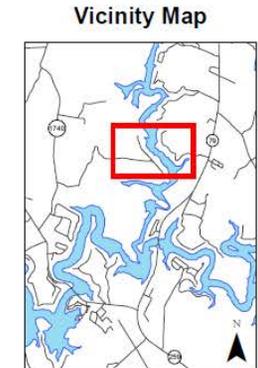
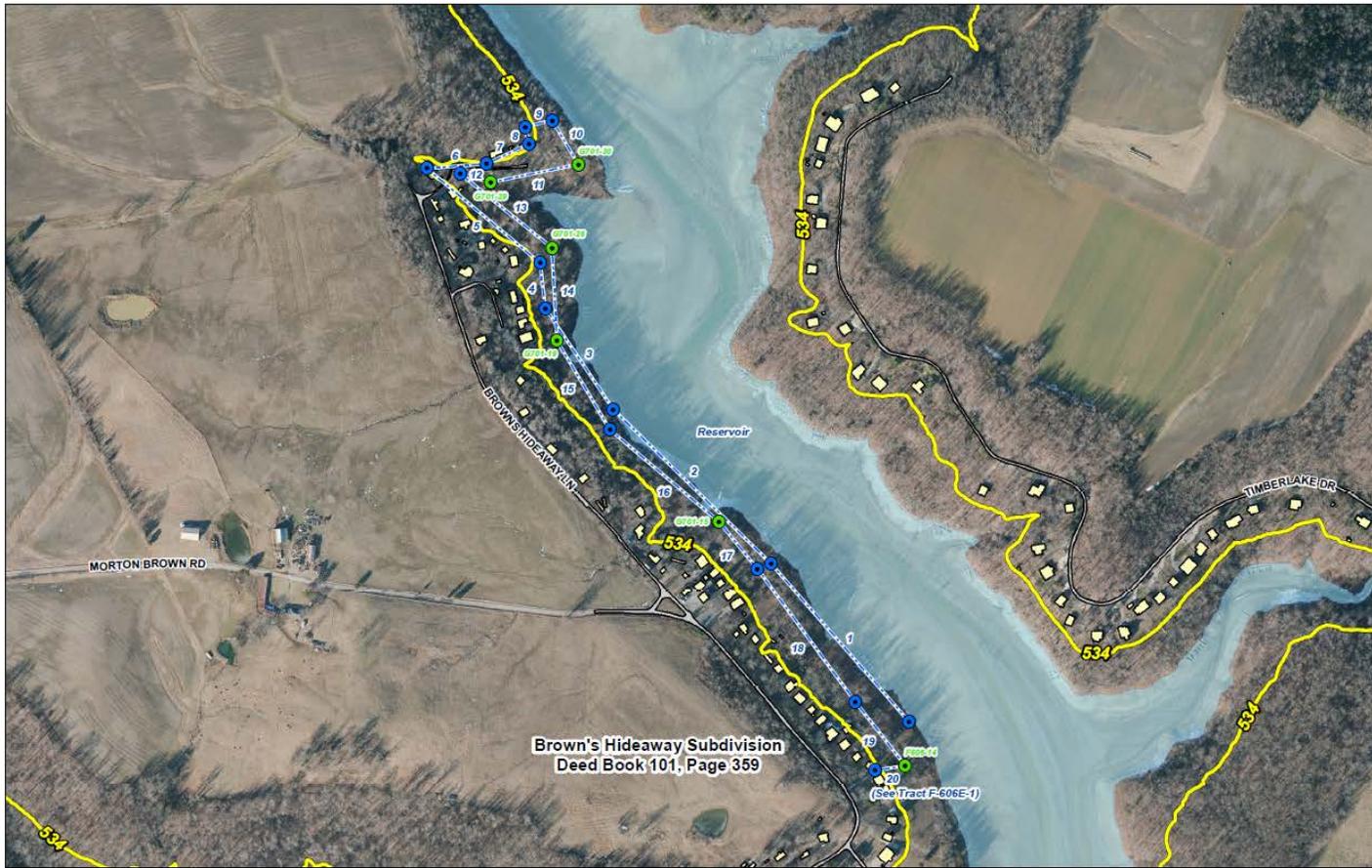
State and County aforesaid do hereby certify that the above Warranty Deed

of Flowage Easement from **FRANCES LILLIAN RHODES, a widow, HART E. RHODES, single, WILLIAM RHODES, single, JOHIE RHODES, single, FRANCIE RHODES and MARGARET RHODES, his wife, MORRIS O'DONOGHUE and STAFFORD O'DONOGHUE, her husband, and JANE CARR and ARMY D. CARR, her husband,**

to the United States of America was produced to me in my county and signed,

acknowledged and delivered by **FRANCES LILLIAN RHODES, a widow, HART E. RHODES, single, WILLIAM RHODES, single, JOHIE RHODES, single, FRANCIE RHODES and MARGARET RHODES, his wife, MORRIS O'DONOGHUE and STAFFORD O'DONOGHUE, her husband,**

Exhibit B



Flowage Easement Calls
From Deed Book 98 Page 149

Line Number	Bearing	Distance (Ft)
1	N 42°02'00" W	825.0
2	N 46°30'00" W	870.0
3	N 34°50'00" W	480.0
4	N 07°18'00" W	180.0
5	N 51°02'00" W	580.0
6	N 84°43'00" E	235.0
7	N 64°28'00" E	185.0
8	N 12°35'00" W	70.0
9	N 76°08'00" E	110.0+/-
10	S 31°12'00" E	200.0+/-
11	S 77°37'00" W	353.4
12	N 74°55'00" W	124.8
13	S 52°00'00" W	466.1
14	S 03°49'00" E	365.6
15	S 31°41'00" E	410.8
16	S 50°45'00" E	560.3
17	S 40°05'00" E	237.4
18	S 37°13'00" E	651.3
19	S 38°37'00" E	320.5+/-
20	S 80°40'00" W	120.0+/-
Closure Error		235.5

Legend

- Fee Simple & Flowage Easement Corner
- Deeded Flowage Easement Corner
- Flowage Easement Line
- 534' Contour From 2014 LIDAR
- Building Footprint
- Normal Summer Pool Level (495')
- Bridge
- Paved Road

Note: The mapping for this project was derived from aerial sources, and is based on North American Datum of 1983 (NAD 83) State Plane Coordinate System, Kentucky South Zone (FIPS 1802). LIDAR data used in the generation of the 534' contour is based on the Rough River COE Vertical Datum for CM1 with an elevation of 554.89, which is a vertical offset of 0.43' above the NAVD83 elevation.

Rough River Lake Breckinridge County, KY

Flowage Easement Map - Segment G, Tract G-701E
Contract #W912QR-09-D-0054, Delivery Order #0031



US Army Corps of Engineers

GRW Engineers
801 Corporate Drive
Lexington, KY 40503
www.grwinc.com

Exhibit B-1

and the right to clear and remove any brush, debris, and natural obstructions which, in the opinion of the representative of the United States in charge of the project, may be detrimental to the project; provided that no structures for human habitation shall be constructed or maintained on the lands and provided further that no structures of other types except farm fences shall be constructed or maintained on the lands except as may be approved in writing by the representative of the United States in charge of the project; reserving, however, to the owners of the lands, their heirs and assigns, all such rights and privileges as may be used and enjoyed without interfering with or abridging the rights and easement hereby conveyed.

Rough River Reservoir, Ky., Project
Tract(s) No.(s) G-701-2

The land over which said easement is conveyed is designated as Tract(s)
No.(s) G-701-2 of the Rough River, Kentucky Project,
more particularly described as follows:

Situate in the State of Kentucky, County of Breckinridge, on the right bank of Tules Creek, approximately 1.00 mile southeast of Koff, Kentucky, approximately 0.25 mile north of the North Fork of Rough River, more particularly described as follows:

Beginning at a hub in the north boundary of the I. C. Wilson property, said hub being located along said line S 80° 40' 00" W 320.0 feet, more or less, from the center line of Tules Creek; thence covering the land of Morton Brown as follows:

N 42° 01' 00" W 625.0 feet

N 46° 30' 00" W 270.0 feet

N 34° 50' 00" W 480.0 feet

N 07° 18' 00" W 180.0 feet /

Exhibit B-1

N 51° 02' 00" W 500.0 feet

N 84° 43' 00" E 235.0 feet

N 64° 28' 00" E 185.0 feet

N 12° 35' 00" W 70.0 feet, more or less, to a hub in the south boundary of the Vestar and Elfra Lewis property; thence with Lewis

N 76° 08' 00" E 110.0 feet, more or less, to a hub; thence covering the property of Morton Brown as follows:

S 31° 12' 00" E 200.0 feet

S 77° 37' 00" W 353.4 feet

Continued on Page 2a

The parties of the first part agree that the easement herein granted shall include all right, title and interest which they have or may have in the banks, beds and waters of any stream opposite to or fronting upon said land, and in any alleys, roads, streets, ways, strips, gores, or railroad rights of way abutting or adjoining said land, and in any means of ingress and egress appurtenant thereto; together with the further right to go upon said land above described from time to time as the occasion may arise and remove therefrom natural and artificial structures or obstructions, including timber and other natural growths and any other obstructions, growths, accumulations, brush, trash, filth, or any other thing, which in the opinion of the duly authorized representative of the United States in charge, may be detrimental to the operation and maintenance of said project.

Excepting and reserving to the parties of the first part the right to remove _____

Exhibit B-1

Page 2a

Rough River Reservoir, Kentucky
Tract(s) No. (s) G-701-E

N 74° 25' 00" W 124.8 feet

S 52° 09' 00" E 466.1 feet

S 03° 49' 00" E 365.6 feet

S 31° 41' 00" E 410.8 feet

S 50° 43' 00" E 560.3 feet

S 40° 05' 00" E 237.4 feet

S 37° 13' 00" E 651.3 feet

S 38° 37' 00" E 320.5 feet, more or less, to a hub in the north boundary of the T. C. Wilson tract; thence with Wilson

S 06° 40' 00" W 129.0 feet, more or less, to a hub, the point of beginning, containing 8.20 acres, more or less.

The above tract being a part of the same land as that described in a deed from Sam and Faye Brown to Norton Brown, dated March 11, 1954, recorded in Deed Book 95, page 223, in the records of Breckinridge County, State of Kentucky.

Rough River Reservoir, Ky., Project
Tract(s) No.(s) G-701-E

on or before _____, 195____. In the event that the said buildings and improvements are not removed on or before said date, the right of removal shall terminate automatically, and the party of the second part shall have a good and indefeasible title to said buildings or improvements, without notice to the parties of the first part.

It is the intention of the parties of the first part, and they hereby agree that the payment of the above specified purchase price shall liquidate in full all past, present and future damages to the above described land that have occurred or may hereafter occur from the overflow or otherwise resulting from the operation of said project, and from the exercising of the rights, powers, privileges, and of the easement herein conveyed, and to whatever fee or interest, if any, which the parties of the first part own

Exhibit B-1

in the land lying and being within the present boundaries of any public roads, highways, rights of way, strips or gores abutting or adjoining the land hereinbefore described and to the appurtenances and improvements thereunto belonging.

It is further understood and agreed that the estate described above is conveyed under and subject to all existing easements for public roads and highways, public streets, public utilities, railroads and pipe lines.

All reservations, exceptions, and any other outstanding rights contained in or referred to in patents issued by the United States.

TO HAVE AND TO HOLD the above described lands to the extent of the interest conveyed herein, together with all rights and appurtenances thereunto belonging unto the UNITED STATES OF AMERICA and its assigns forever.

And the parties of the first part, for themselves and their heirs, do hereby covenant with the party of the second part that they are lawfully seized of the premises aforesaid; that the premises are free and clear from all encumbrances whatsoever; and they will warrant and defend the same, with the appurtenances, unto the party of the second part against the lawful claims of all person whomsoever, except as hereinbefore noted.

IN TESTIMONY WHEREOF, the parties of the first part hereunto subscribe their names on the day and year first above-mentioned.

/s/ Morton Brown
MORTON BROWN

/s/ Kathleen Brown
3
KATHLEEN BROWN

Exhibit B-1

Rough River Reservoir, Ky., Project
Tract (s) No.(s) G-701-B

CERTIFICATE

STATE OF KENTUCKY)
) SS
COUNTY OF **BRECKINRIDGE**

I, /s/ Howard E. Meixner, a Notary Public in and for the State and County aforesaid do hereby certify that the above Warranty Deed of Flowage Easement from ~~MERTON BROWN and KATHLEEN BROWN~~ **BROWN, his wife**

to the United States of America was produced to me in my county and signed, acknowledged and delivered by ~~MERTON BROWN and KATHLEEN BROWN~~ **BROWN, his wife**

to be their free and voluntary act and deed for the purposes therein mentioned.

Witness my hand this 9th day of July 1958.

/s/ Howard E. Meixner
NOTARY PUBLIC

NOTARY PUBLIC SEAL

My Commission Expires:

July 3, 1960

CERTIFICATE OF RECORDATION

STATE OF KENTUCKY)
) SS
COUNTY OF **BRECKINRIDGE**

I, /s/ Charles L. Miller, Clerk of the County Court, for the County and State aforesaid, do certify that on the 9 day of

Exhibit B-1

July 19 58 at 4:00 o'clock, P. M., the foregoing deed was produced to me in my office and lodged for record. Whereupon I have duly recorded the same together with this and preceding certificate in my office.

This 9 day of July 1958.

/s/ Charles L. Miller, Clerk

By /s/ Johnny De Jarnette, D. C.

**Recorded in Breckinridge County
Court Clerk's Office in Deed
Book No. 98 at page 150**

Exhibit C

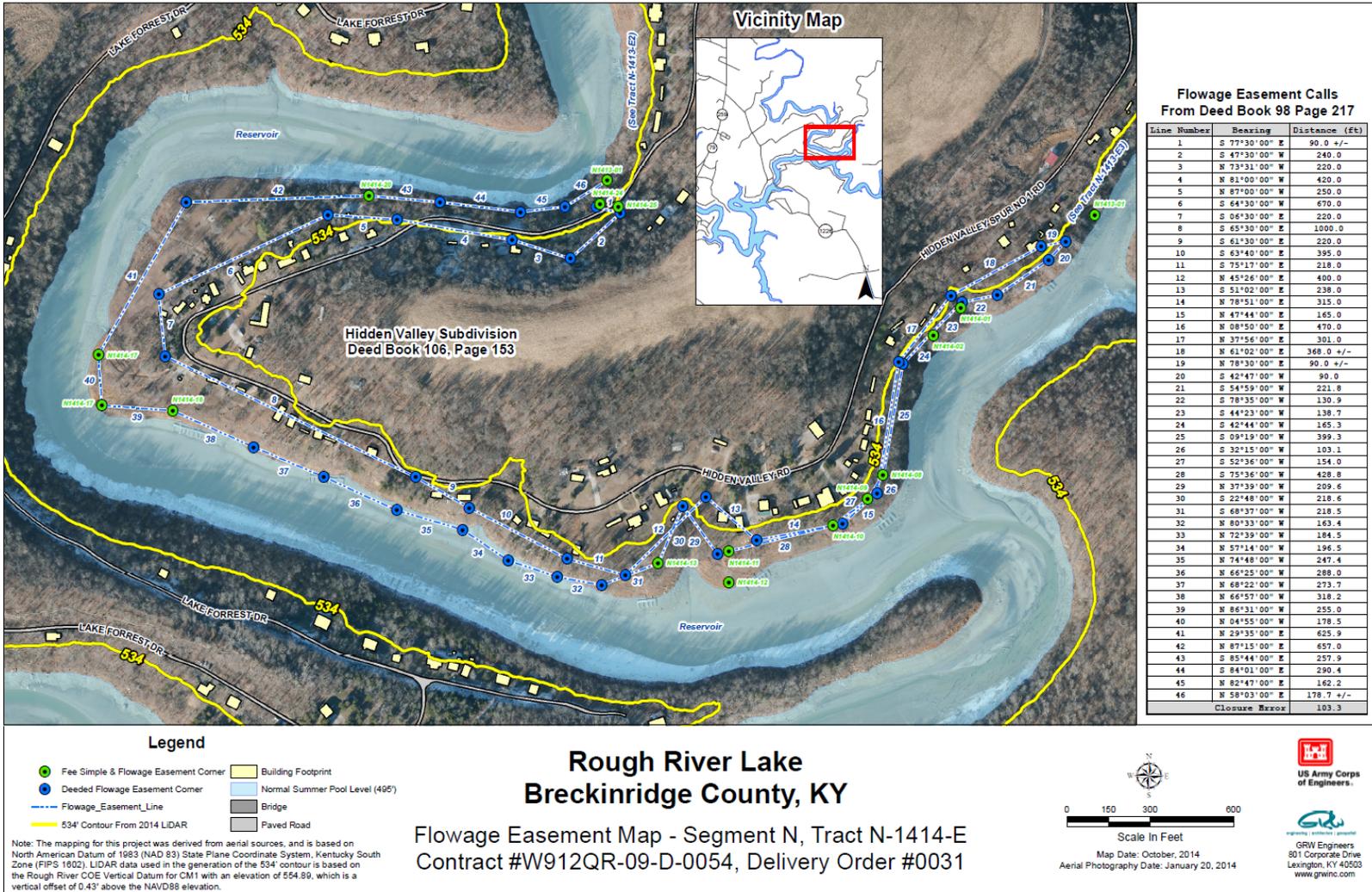


Exhibit C-1

DOCUMENTARY STAMPS: \$0.00

Rough River Reservoir, Ky., Project
Tract(s) No.(s) E-1414-2

WARRANTY DEED OF FLOWAGE EASEMENT

THIS WARRANTY DEED OF FLOWAGE EASEMENT made and entered into this 17th
day of July 1958 by and between ~~COLEMAN GALLOWAY and~~ STACIA
~~GALLOWAY, his wife~~

parties of the first part, and THE UNITED STATES OF AMERICA, party of the second
part,

parties of the first part, and THE UNITED STATES OF AMERICA, party of the second
part,

WITNESSETH

That for and in consideration of the sum of EIGHTY-FIVE *****
***** Dollars (\$ 85.00)

this day paid by the party of the second part to the parties of the first part,
the receipt of which is hereby acknowledged, the parties of the first part do
hereby GRANT, BARGAIN, SELL AND CONVEY unto the party of the second part, and
its assigns, the perpetual right, power, privilege and easement occasionally
to overflow, flood and submerge the land hereinafter described, and the right
to maintain mosquito control over said land in connection with the Rough River

Reservoir Project as authorized by the Act of Congress approved June 28, 1938
(Public Law 761 - 75th Congress) together with all right, title and interest
in and to the structures and improvements now situate on the land; excepting

Exhibit C-1

and the right to clear and remove any brush, debris, and natural obstructions which, in the opinion of the representative of the United States in charge of the project, may be detrimental to the project; provided that no structures for human habitation shall be constructed or maintained on the lands and provided further that no structures of other types except farm fences shall be constructed or maintained on the lands except as may be approved in writing by the representative of the United States in charge of the project; reserving, however, to the owners of the lands, their heirs and assigns, all such rights and privileges as may be used and enjoyed without interfering with or abridging the rights and easement hereby conveyed.

Rough River Reservoir, Ky., Project
Tract(s) No.(s) 2-1414-B

The land over which said easement is conveyed is designated as Tract(s)
No.(s) 2-1414-B of the Rough River, Kentucky Project,
more particularly described as follows:

Situate in the State of Kentucky, County of Breckinridge, on the left bank of the North Fork of Rough River, approximately 11.0 miles upstream from the confluence of the North Fork and Rough River, more particularly described as follows:

Beginning at a hub in the south boundary of the Singleton Decker tract, said hub being located along said boundary S 77° 30' 00" E 170.0 feet, more or less, from the center line of the North Fork of Rough River; thence along said boundary

S 77° 30' 00" E 95.0 feet, more or less, to a hub; thence severing the land of Colman Galloway as follows:

S 47° 30' 00" W 240.0 feet

S 73° 00' 00" E 220.0 feet

Exhibit C-1

N 21° 00' 00" W 420.0 Feet
S 67° 00' 00" W 250.0 Feet
S 64° 30' 00" W 670.0 Feet
S 66° 30' 00" E 225.0 Feet
S 65° 30' 00" E 1061.0 Feet
S 61° 30' 00" E 225.0 Feet
S 63° 40' 00" E 395.0 Feet
S 73° 17' 00" E 215.0 Feet
N 43° 25' 00" E 405.0 Feet

Continued on Page 2a

The parties of the first part agree that the easement herein granted shall include all right, title and interest which they have or may have in the banks, beds and waters of any stream opposite to or fronting upon said land, and in any alleys, roads, streets, ways, strips, gores, or railroad rights of way abutting or adjoining said land, and in any means of ingress and egress appurtenant thereto; together with the further right to go upon said land above described from time to time as the occasion may arise and remove therefrom natural and artificial structures or obstructions, including timber and other natural growths and any other obstructions, growths, accumulations, brush, trash, filth, or any other thing, which in the opinion of the duly authorized representative of the United States in charge, may be detrimental to the operation and maintenance of said project.

Excepting and reserving to the parties of the first part the right to remove _____

Exhibit C-1

Page 2a

Rough River Reservoir, Kentucky
Tract No. N-1A14-E

S 51° 02' 00" E 236.0 feet

N 78° 51' 00" E 315.0 feet

N 47° 44' 00" E 155.00 feet

N 08° 59' 00" E 476.0 feet

N 37° 56' 00" E 301.0 feet

N 51° 02' 00" E 355.0 feet, more or less, to a hub in the south boundary
of the Singleton Decker tract; thence with said boundary

N 78° 39' 00" E 79.0 feet, more or less, to a hub; thence covering the
land of Coleman Galloway as follows:

S 42° 47' 00" W 90.0 feet

S 54° 59' 00" W 221.0 feet

S 78° 33' 00" W 159.9 feet

S 44° 23' 00" W 136.7 feet

Exhibit C-1

S 42° 44' 00" W 169.3 Feet
S 02° 19' 00" W 309.3 Feet
S 32° 13' 00" W 103.1 Feet
S 32° 36' 00" W 154.0 Feet
S 73° 34' 00" W 420.8 Feet
N 37° 29' 00" W 209.6 Feet
S 22° 48' 00" W 218.6 Feet
S 08° 37' 00" W 210.3 Feet
N 05° 35' 00" W 153.4 Feet
S 72° 39' 00" W 104.3 Feet
N 27° 14' 00" W 194.3 Feet
N 70° 40' 00" W 247.8 Feet
N 06° 25' 00" W 200.0 Feet

N 08° 32' 00" W 273.6 Feet
N 66° 37' 00" W 314.2 Feet
N 85° 31' 00" W 233.0 Feet
S 04° 33' 00" W 170.3 Feet
N 29° 35' 00" E 425.0 Feet
S 07° 15' 00" E 407.0 Feet
S 03° 44' 00" E 237.9 Feet
S 04° 01' 00" E 293.4 Feet
N 03° 47' 00" E 162.2 Feet

Continued on Page 25

Exhibit C-1

Page 1b

Rough River Reservoir, Kentucky
Tract No. R-1414-E

N 36° 09' 00" E 175.7 feet, more or less, to a hub, the point of beginning, containing 17.50 acres, more or less.

The above tract being a part of the same land as that described in a deed from Robert and Will Lewis to Coleman Galloway, dated October 1, 1957 and recorded in Deed Book 97, page 48, ~~as the subject of Breckinridge County, Kentucky~~; and quitclaim Deeds to Coleman Galloway from Ann Lou Wilson and from Ida Mattingly, et al, recorded in Deed Book 97, pages 619 and 508, respectively. See also affidavit of descent recorded in Deed Book 97, page 508, all in the records of Breckinridge County, State of Kentucky.

Rough River Reservoir, Ky., Project
Tract(s) No.(s) R-1414-E

on or before _____, 19____. In the event that the said buildings and improvements are not removed on or before said date, the right of removal shall terminate automatically, and the party of the second part shall have a good and indefeasible title to said buildings or improvements, without notice to the parties of the first part.

It is the intention of the parties of the first part, and they hereby agree that the payment of the above specified purchase price shall liquidate in full all past, present and future damages to the above described land that have occurred or may hereafter occur from the overflow or otherwise resulting from the operation of said project, and from the exercising of the rights, powers, privileges, and of the easement herein conveyed, and to whatever fee or interest, if any, which the parties of the first part own in the land lying

Exhibit C-1

and being within the present boundaries of any public roads, highways, rights of way, strips or gores abutting or adjoining the land hereinbefore described and to the appurtenances and improvements thereunto belonging.

It is further understood and agreed that the estate described above is conveyed under and subject to all existing easements for public roads and highways, public streets, public utilities, railroads and pipe lines.

All reservations, exceptions, and any other outstanding rights contained in or referred to in patents issued by the United States.

TO HAVE AND TO HOLD the above described lands to the extent of the interest conveyed herein, together with all rights and appurtenances thereunto belonging unto the UNITED STATES OF AMERICA and its assigns forever.

And the parties of the first part, for themselves and their heirs, do hereby covenant with the party of the second part that they are lawfully seized of the premises aforesaid; that the premises are free and clear from all encumbrances whatsoever; and they will warrant and defend the same, with the appurtenances, unto the party of the second part against the lawful claims of all persons whomsoever, except as hereinbefore noted.

IN TESTIMONY WHEREOF, the parties of the first part hereunto subscribe their names on the day and year first above-mentioned.

/s/ Coleman Galloway

COLEMAN GALLOWAY

/s/ Stacia Galloway

STACIA GALLOWAY

Exhibit C-1

Rough River Reservoir, Ky., Project
Tract(s) No.(s) N-1414-K

CERTIFICATE

STATE OF KENTUCKY)
) SS
COUNTY OF BRECKINRIDGE)

I, Rudy O. Keel, a Notary Public in and for the
State and County aforesaid do hereby certify that the above Warranty Deed
of Flowage Easement from COLEMAN GALLOWAY and STACIA GALLOWAY,
his wife

to the United States of America was produced to me in my county and signed,
acknowledged and delivered by COLEMAN GALLOWAY and STACIA GALLOWAY,
his wife

to be their free and voluntary act and deed for the purposes therein men-
tioned.

Witness my hand this 17th day of July 1958.

(NOTARY PUBLIC SEAL)

/s/ Rudy O. Keel
NOTARY PUBLIC
State of Kentucky-at-Large

My Commission Expires:

26 December 1961

CERTIFICATE OF RECORDATION

STATE OF KENTUCKY)
) SS
COUNTY OF BRECKINRIDGE)

I, Charles L. Miller, Clerk of the County Court, for the

Exhibit C-1

County and State aforesaid, do certify that on the 17 day of July
19 58 at 4:00 o'clock, p M., the foregoing deed was produced to
me in my office and lodged for record. Whereupon I have duly recorded the same
together with this and preceding certificate in my office.

This 17 day of July 19 58.

Charles L. Miller, Clerk

By /s/ Johnny DeJarnette, D. C.

Exhibit D
GUIDE TO
FLOWAGE EASEMENT ENCROACHMENT RESOLUTION
ROUGH RIVER LAKE and NOLIN RIVER LAKE
November 3, 2011

1. **Background:**

In the past the District has allowed some consideration for mobile trailers that would remain on a temporary, short-term basis on flowage easement lands. The trailer issue was viewed from a temporary vs. permanent rather than habitable vs. non-habitable perspective. Many of the trailers that were considered temporary have turned into permanent structures as wheels have been removed or rotted, decks have been attached, and utilities have been permanently connected. The projects estimate that over 300 habitable structures, consisting of mobile homes, campers and houses, are located below the designated flowage easement elevation. The flowage easement elevation guide is 534 mean sea levels (msl) at Rough and the flowage easement is 566 msl at Nolin. Many structures were flooded partially or completely between April 28, 2011 and May 13, 2011. Some utilities were disconnected by utility companies.

On June 3, 2011, a letter regarding the Rough River Lake project was sent by Real Estate Division (RE) to multiple utility companies stating that “Within the boundary of each respective flowage easement, we have not consented, nor do we intend to consent to any habitable structures. While we do consent to certain facilities which support habitable structures located above (the flowage easement elevation), it is our intent to deny consent for any facility (e.g. lateral lines, power poles, or decks) which supports a habitable structure below elevation 534 msl.

2. **Issues:**

1. Following inundation during the 2011 flood, structures that are ‘easily and readily removable’ from flowage easement may be allowed to be replaced or reinstalled if certain conditions are met and agreed to by the owner of the structure. What constitutes an “easily and readily removable structure”?
2. What will be the procedure to obtain compliance if the owner fails to meet conditions for retention or placement of an “easily and readily removable structure”?

3. **Issue #1:**

1. Definition of an ‘easily and readily removable structure’:

Exhibit D

- The original hitch tongue and wheels/axels are maintained, attached, operable and accessible.
- Leveling is accomplished by equipment that is original to the structure and supplied by the manufacturer for such purposes.
- The electrical and water supply connections are easily disconnected such as those used in a campground.
- Has no permanently attached decks, steps, screened in porches, roofed enclosures or other attachments that would hinder timely removal of the structure.
- Is not blocked by other structures and can be readily attached to a vehicle and towed to higher ground.
- Has a clear path for removal.

All structures not meeting the description stated in paragraph 3. Section 1, shall constitute an encroachment on flowage easement.

2. Definition of a structure that is **NOT** 'easily or readily removable' and considered an encroachment:
 - Resting on blocks and/or wheels are off the ground.
 - Any support other than original equipment is used to level the structure.
 - Permanent water and electric hook-ups that are hard plumbed or hard wired.
 - Attachments such as a deck, steps, roofed enclosure, screened in porch or other enclosure which restricts the ability to remove the structure.
 - Structure that is blocked in by other structures and must wait until another structure is moved before being moved.
 - Any environmental conditions allowed to exist which would prevent the structure from being moved (trees, utilities/poles, ditches, creeks, or similar conditions.)

4. Issue #2:

A. Procedure for obtaining removal of an encroachment on flowage easement that fails to comply with the above definition of an 'easily and readily removable structure'.

1. Field personnel will:
 - Identify and document encroachment to include location, description and photos
 - Identify owner of the encroaching structure

Exhibit D

- Make initial verbal notification to owner of encroachment with information on how the encroachment may be resolved.
 - Provide documentation of encroachment along with landowner information to Real Estate Division.
2. Real Estate Division will:
- Review encroachment information received from the project.
 - Send owner a cure letter allowing them 180 (approximately) days to remove encroachment or information on how to bring the structure into compliance.
- B. Procedure for obtaining correction when land owner fails to resolve encroachment:
1. Field personnel will:
- Document failure of landowner to remove encroachment.
 - Conduct initial verbal notification to landowner and explore any extenuating circumstances that may warrant an extension of time to correct encroachment.
 - Provide all documentation of failure to correct encroachment to Real Estate Division.
2. Real Estate Division will:
- Provide second cure letter to landowner with statement that the government may pursue legal action to correct encroachment.
 - If encroachment remains after stated time period to cure, RE will pursue legal means to have encroachment removed.

5. Landowner Responsibility:

It is the landowner's responsibility to:

- Find out how flowage easement restrictions relate to their property
- Obtain necessary consents
- Know the elevation of their personal property,
- Know when or if the access road floods,
- Monitor the lake level
- Take appropriate action in advance to remove their personal property during periods of high water.

6. Unique Situations:

Each situation can not be identified here and will be considered on a case-by-case basis using the guidelines provided above.

Exhibit D

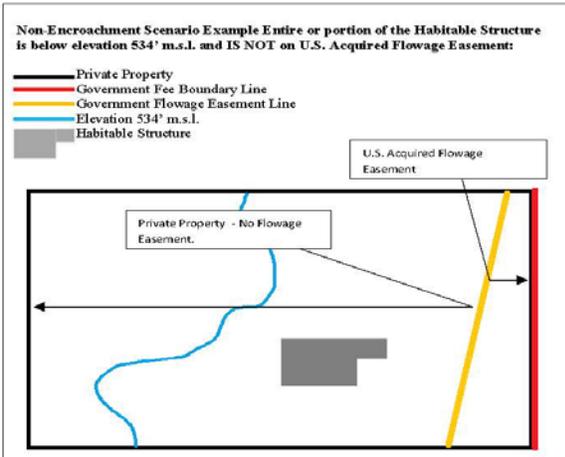
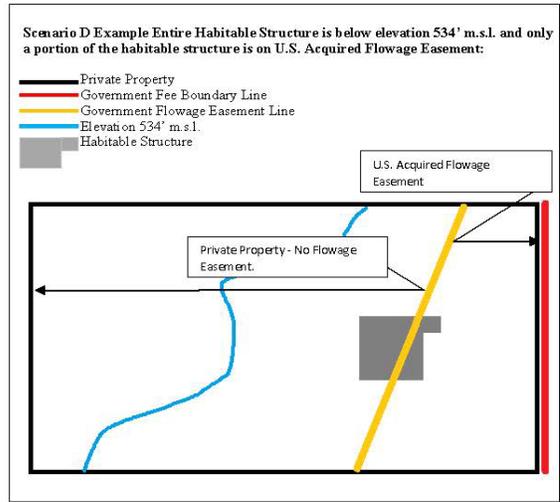
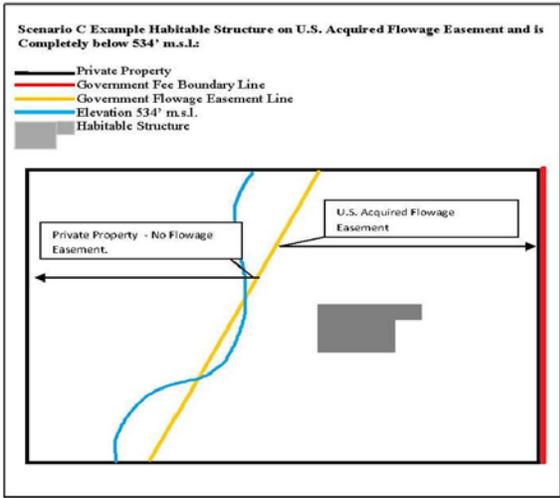
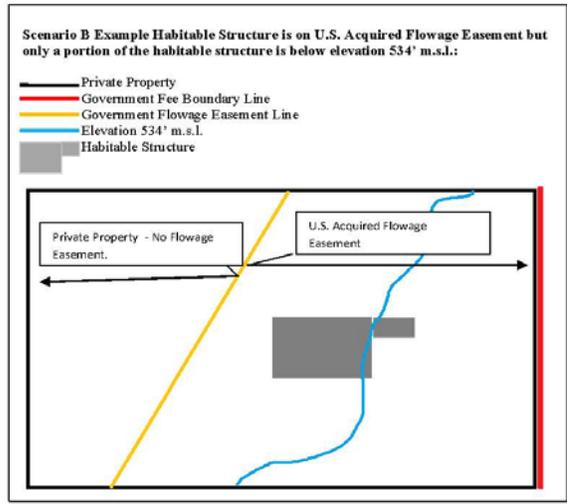
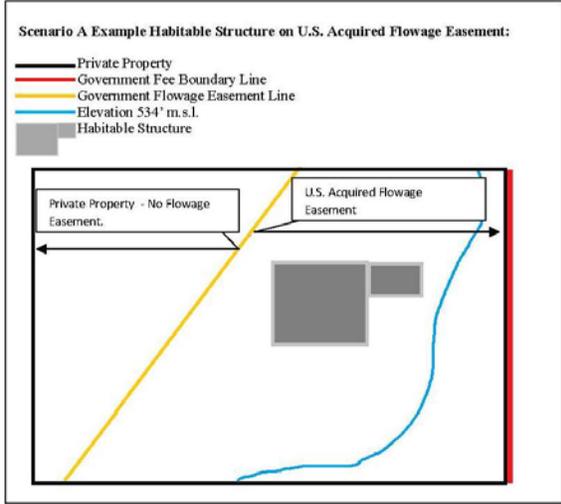
7. Additional Information:

State regulations also impacting flowage easement areas per Breckinridge County Electrical Inspector and Breckinridge County Health Department Inspector:

1. Mobile homes have their own state electrical standards:
 - Prior to any electric service being reconnected or connected the owner must have a state approved septic system.
 - In accordance with the Breckinridge County Health Department septic systems, including septic holding tanks, are not permitted on flowage easement.
 - Septic holding tanks are not authorized in the State of Kentucky except for commercial activities.

2. Recreational Vehicles (RV's, Campers, etc.) have their own state electrical standards:
 - Does not require a state approved septic system.
 - Can only be connected with a camper style temporary electrical connection similar to that used in campgrounds.

Exhibit E





DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
P.O. BOX 59
LOUISVILLE, KENTUCKY 40201-0059

Real Estate Division

MAY 18 2015

Dear Homeowner:

The U.S. Army Corps of Engineers (USACE) conducted a survey of the flowage easement in your area of Rough River Lake, Kentucky. Based on this survey, it was noted that your home may be located on flowage easement acquired in the 1950's prior to construction of the project.

The project authorization set the upper guide contour for acquisition of fee land at 514' mean sea level (m.s.l.), and the upper guide contour for acquisition of occasional flowage easement at 534' m.s.l. Identification of the actual acquired fee and flowage easement elevations must be determined by survey. The United States acquired the flowage easement at Rough River Lake in order to store water during flood events. The deeds of flowage easement provide the right to the Government to occasionally flood the property and specifically restrict the construction of structures for human habitation. Structures on USACE flowage easement are identified as encroachments on the rights the US has obtained.

USACE is developing a project-wide resolution to specifically identify and address habitable structure encroachments at Rough River Lake. As this resolution is developed, Ms Jo-Ellen Darcy, Assistant Secretary of the Army (Civil Works), has directed a moratorium effective April 24, 2015 (copy enclosed) on resolution actions regarding encroaching habitable structures at the Rough River Lake project. This moratorium pertains to completed construction prior to January 1, 2013 that is wholly above elevation 527.4' m.s.l., the elevation of the record flood event of 2011. This moratorium restricts the processing of requests for release of the human habitation restriction.

Properties within the flowage easement are subject to flooding, consistent with USACE Rough River Lake project operations. The US is not responsible for loss of life and/or property due to USACE exercise of flowage easement rights. If your habitable structure is below elevation 534' m.s.l., the authorized upper guide contour for acquisition of the occasional flowage easement, you are encouraged to closely monitor lake levels for flooding risks. Information on lake levels and flooding risks is available at <http://lrl-apps.lrl.usace.army.mil/wc/reports/lkreport.html>.

Please contact Patty Smith, Louisville District Real Estate Division at 502-315-7017 with any questions regarding the moratorium.

Sincerely,


Christopher G. Beck
Colonel, Corps of Engineers
Commanding

Enclosure

EXHIBIT F



DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
CIVIL WORKS
108 ARMY PENTAGON
WASHINGTON DC 20310.0108

APR 24 2015

MEMORANDUM FOR THE DIRECTOR OF REAL ESTATE

This responds to a memorandum from the Acting Director of Real Estate dated October 15, 2014, requesting approval for release of human habitation restriction at Tract Number A-108-E, Rough River Lake Kentucky. Approval is not granted for this request to release the restriction on human habitation at Tract Number A-108-E; however, as discussed below, this should not be interpreted as a denial of the release.

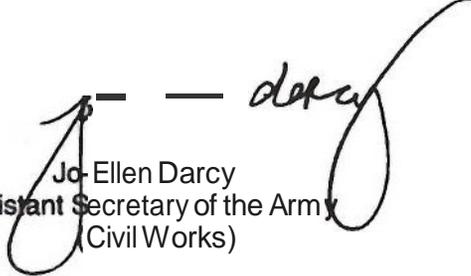
It has come to my attention there are a large number of habitable structures located at least partially within Federally held flowage easements at Rough River Lake Project, KY. While the U.S. Army Corps of Engineers (Corps) develops a lake-wide resolution plan, effective immediately, I am placing a moratorium on the forced removal of all encroaching habitable structures at Rough River that completed construction prior to January 01, 2013, and are wholly above the elevation of 527.4' mean sea level, the record flood event level at this project. In addition, during this moratorium approval will not be granted for the release of human habitation restriction on these parcels.

As of the date of this memorandum, any re-construction or structural modification to an existing habitable structure that otherwise meets moratorium eligibility criteria, will trigger ineligibility and immediate steps toward removal of the structure(s). There is also an exception to the enforcement moratorium for immediate removal of any habitable structure that in the opinion of the District Engineer creates an unreasonable risk to project operations or public health and safety.

Moratorium-eligible habitable structures are still subject to flooding, consistent with Corps project operations and U.S. flowage easement rights. The United States is not responsible for loss of life and/or property due to the Corps' exercise of perpetual flowage easement rights, and it is incumbent upon encroaching homeowners to monitor lake levels closely.

This moratorium does not impact non-habitable structures and other encroachments. All such determinations regarding classification and eligibility are made solely at the discretion of the District Engineer. This moratorium may be rescinded or modified at any time, and will be revisited once a lake-wide resolution plan is finalized, if not before then.

The District is directed to provide owners of habitable structures that are believed to be in a flowage easement notice of this moratorium. Enclosed with this memorandum is a suggested draft letter for this purpose. We defer to the District Engineer to revise this letter to include additional information as appropriate.


Jo Ellen Darcy
Assistant Secretary of the Army
(Civil Works)

CF:
Deputy Commanding General for Civil and Emergency Operations
Director of Civil Works



DEPARTMENT OF THE ARMY

U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

28 APR 1993

REPLY TO
ATTENTION OF:

CECW-PA

MEMORANDUM FOR MAJOR SUBORDINATE COMMANDS AND DISTRICT COMMANDS

SUBJECT: Policy Guidance Letter No. 32, Use of Corps Reservoir
Flowage Easement Lands

1. Reference: ER 405-1-12, Real Estate Handbook

2. Background: The U.S. Army Corps of Engineers has received several recent requests to use and develop flowage easement lands. These requests were elevated to HQUSACE and the Assistant Secretary of the Army for Civil Works (ASA(CW)) for resolution. This prompted a policy review on use of Corps flowage easement lands. While our review has indicated that policy, taken as a whole, is adequate, we need to consolidate and clarify the existing guidance.

3. Policy: Flowage easement lands present a difficult challenge. The Corps has only purchased certain rights associated with periodic water storage on the property and does not exercise the absolute control associated with ownership in fee. Therefore, the Corps ability to plan for developing and using flowage easement lands in the master planning process is limited. Though easement provisions may vary, reference 1 sets forth the current flowage easement requirements. It provides that no structure for human habitation shall be constructed or maintained on the land, that no other structure shall be constructed or maintained on the land except as may be approved in writing by the Corps and that no excavation shall be conducted or landfill placed without Corps approval. Under the standard flowage easement the land use decisions under the purview of the District Commander are approval for structures other than for human habitation, and approval of excavations or landfill placements. Final approval authority for release of the restriction on human habitation rests with the ASA(CW). Guidance on considerations in making the land use decisions and recommendations for flowage easements is presented in the following paragraphs. This guidance applies to decisions on future land use and does not apply to corrective actions for unpermitted encroachments on flowage easement areas.

EXHIBIT G

CECW-PA

SUBJECT: Policy Guidance Letter No. 32, Use of Corps Reservoir
Flowage Easement Lands

a. Structures Other Than For Human Habitation. Approval for structures other than for human habitation rests with the District Commander. However, to insure national and regional consistency in policy application, any approval action must be coordinated with the Major Subordinate Commander before it is finalized. The following criteria should be used for evaluating the approval of these structures on flowage easement lands.

(1). Compatibility With Project Operations. The structure must be compatible with project operations. Therefore, any proposal which would result in a significant increase in debris or sedimentation in the reservoir will not be approved. Any proposed structure for the production or storage of highly volatile, hazardous, toxic, or water reactive materials will not be approved.

(2). Compatibility With Floodplain Management. In accordance with the requirements of the national policies on floodplain management, any nonresidential structure (building), including such structures as barns and storage buildings, must be elevated above the 100 year floodplain or floodpool or floodproofed watertight to or above the 100 year flood level. Also the landowner must demonstrate that there is no practical alternative to location of the structure other than within the floodpool or floodplain. Certain types of development are compatible with periodic low velocity inundation including parking lots and other paved surfaces, field recreation facilities (backstops, goalpost etc.) and open type structures (picnic shelters). These kinds of developments would generally be approved unless their construction reduced the flood control storage capacity of the project or considerations of safety or property damage preclude the approval (for example, inadequate warning time to evacuate people from a recreation area).

b. Excavations or Landfills. The primary consideration in approving excavations or landfill placements is the preservation of the flood storage capacity of the project. Therefore, landfill placements will not be approved unless substitute flood storage is provided. Proposals for excavation and grading of flowage easement areas will not be approved if they result in loss of flood control storage. Approval authority for excavations and landfills rests with the District Commander. However, to insure national and regional consistency in policy application, any approval action must be coordinated with the Major Subordinate Commander before it is finalized.

CECW-PA

SUBJECT: Policy Guidance Letter No. 32, Use of Corps Reservoir
Flowage Easement Lands

c. Release from Restriction on Human Habitation.

Generally, the restriction on human habitation will not be recommended for release. Human habitation below the flood control or navigation pool elevation places an undue limitation on the Congressionally authorized operation of the project. However, if it can be demonstrated that the release will not result in a significant threat to human life, health, or safety and will not place or suggest any restriction on the operation of the project, the release may be approved under certain conditions. As with other structures, such developments must meet the requirements of national policy on floodplain management as set forth in Executive Order 11988 and its implementing regulations. Executive Order 11988 requires consideration of alternatives which avoid the floodplain wherever practical. Therefore, any landowner requesting relief from the restriction on human habitation in a floodplain or project pool must also demonstrate that there is no practical alternative to the location of the habitable structure. In addition to satisfying these requirements, if there is any threat to human life, the proposal for release of the human habitation restriction will not be recommended for approval. However, if it can be demonstrated that there would be adequate warning time to evacuate the structure in the event of a flood that would inundate the site and that non-flooded egress out of the area would be available for evacuation including non-flooded egress out of the project area (offsite) then it may receive approval. Proposals for release of human habitation restriction must be submitted through the Major Subordinate Command to HQUSACE for approval by ASA(CW). The human habitation restriction is a property right acquired by the Federal Government which must be released by a deed, including the provision for adequate compensation for the disposal, in accordance with reference 1.

4. The contents of this memorandum will be incorporated into reference 1 as that guidance is updated.

FOR THE COMMANDER:



STANLEY G. GENEGA
Brigadier General (P), USA
Director of Civil Works

Appendix 1

Rough River Lake Encroachment Resolution Plan

Hydrology and Hydraulics

Impact of Structures within the Flowage Easement of Rough River Lake

Louisville District's Hydrology and Hydraulic Design Section (LRL-EDT-H) was asked if allowing structures to remain in place (below the flowage easement) would adversely impact Rough River Lake's flood mitigation storage. This task required determination of the loss of available flood mitigation storage from an estimated 1,225 structures located above the spillway crest (elevation 524) and below the flowage easement (elevation 534).

The flood mitigation storage available between elevations 524 and 534 is 115,380 acre feet. This value is from the storage-elevation table found in the project's authorized Water Control Manual. In order to ascertain the impact of the structures within the flowage easement, one must first determine the volume of the structures' impermeable components from elevation 524 to elevation 534.

Ideally, one would survey and inventory each and every structure to determine the volume of the structure's impermeable components. This would include the collective volume from wall studs, roof trusses, sheetrock, plywood, wiring, plumbing, shingles, appliances, personal contents, etc. These components would displace flood control storage when inundated. The empty space (voids) within the structures will have no impact to flood mitigation since they provide the same storage as if the structure were not in place. These voids include rooms, hallways, attics, storage facilities including cabinets, etc. Ironically, if a structure has a basement and the excavated material was moved above the flowage easement, the structure can actually provide an increase in flood mitigation storage when compared to an undeveloped lot.

An inventory and subsequent computation of each and every structure's impermeable content is obviously unreasonable. Therefore, some basic conservative assumptions were made to compute the average displacement (volume) per structure. This average displacement was then applied to the latest assessment of the total number of structures within the flowage easement.

Many of the structures below the flowage easement are utilized as summer homes or camps. Most of these homes have floor plans with an area (length of structure x width of structure) which range in size from 1,000 to 2,000 square feet (sq ft). An average structure area of 1,500 sq ft was deemed to be a reasonable estimate for use in this analysis. When one examines a structure it is obvious that most of the area falls into the category of a "void" as opposed to "impermeable". For this analysis, a conservative estimate of the impermeable area, 25%, was used. Therefore, for a 1,500 sq ft structure, 25% or 375 sq ft would be impermeable, actually displacing flood mitigation storage. The remaining 1,125 sq ft would be classified as "voids" and have no adverse impact to the available flood mitigation storage.

As stated above, the 375 sq ft is an area, not a volume. In order to convert area to a volume, the elevation at which the structure resides must be known. The elevation will give us the dimension of height, which will allow us to convert an area (length x width) to a volume (length x width x height).

Since we are analyzing the impact to the flood mitigation volume from elevation 524 to 534, there is a difference between the impervious volume of a structure whose floor elevation is at 524 as opposed to an identical structure whose floor elevation is at elevation 533.5. A structure whose impervious area was 375 sq ft and located at elevation 524 could have impacts all the way to elevation 534, a vertical distance of 10 ft. This structure would displace a volume of 3,750 cubic feet (375 sq ft x 10 ft). Conversely, a structure at elevation 533.5 would only have a vertical measurement of 0.5 ft of height in the flowage easement. This equate to a volume of 187.5 cubic feet (375 sq ft x 0.5 ft). Since we do not have sufficient information available to make a reasonable estimate of the first floor elevation, we decided to look at the impact utilizing a “worst case” scenario, where every structure was assumed to be located at elevation 524 and have an impact all the way to elevation 534. Therefore, each structure was assumed to displace 3,750 cubic feet of flood mitigation storage from elevation 524 to 534.

At this time, the best estimate of the total number of structures is 1,225 which lie below the flowage easement. Utilizing the methodology for determine volume displacement of these structures outlined above yields a total volume of 4,593,750 cubic feet (1,225 x 3,750 cubic feet). Conversion of this value to acre feet (divide by 43,560) yields 105 acre feet.

Given the above known flood mitigation storage available between spillway crest and the flowage easement (115,380 acre feet) and the estimated lost volume due to the structures which lie in this regime (105 acre feet), the loss of flood mitigation storage as a result of the structures is < 0.1%. This will not affect the project’s ability to perform as originally designed.

In addition to the loss of flood mitigation storage from structures below the flowage easement, LRL-EDT-H was asked if inundation of these structures would interfere with the operation of Rough River Lake during a spillway event. During such an event, the conduit gates are opened to their maximum setting and the inflow volume which exceeds this setting is passed though the Project’s emergency uncontrolled spillway.

During a spillway event, the speed at which the pool elevation would rise is not enough to dislodge structures from their foundations. Inundation from a rising pool is not the same as inundation from tidal surge nor riverine flooding, where the velocity of the flood water may be great enough to dislodge structures and possibly turn them into debris.

The major tributaries within the Project’s headwaters are meandering and by that nature, not conducive to allowing debris to move past the next bend towards the impoundment. This statement also applies to the impoundment itself, which meanders and is not conducive for transporting debris towards the spillway.

During high pool flood events, the velocity of the water within the Project’s impoundment is quite low. Debris that does find its way into the impoundment is not transported far. During

Rough River Lake's spillway event in 2011, no debris, whether it occurred naturally within the impoundment (i.e. trees) or was placed there by man, was noted in, nor passed through, the spillway.

In conclusion, it is my professional opinion that the structures that lie within the flowage easement of Rough River Lake will not adversely impact the operation of the project as originally designed and currently authorized.

Richard L. Pruitt, P.E.
Chief, Hydrology and Hydraulic Design Section
USACE, Louisville District

Appendix 2
Rough River Lake Encroachment Resolution Plan

**Utilizing GIS Capabilities to Identify
Flowage Easement Encroachments at Rough River Lake**

Traditional field surveying methods are necessary to accurately identify flowage easement encroachments. Approximate locations and numbers of flowage easement encroachments at Rough River Lake could be *estimated* (emphasis added) by utilizing GIS software, existing data and easement legal descriptions. However, the accuracy of those resulting estimates would be extremely low in most areas due to flaws in the original legal descriptions contained in the Warranty Deeds of Flowage Easement.

The flowage easement boundaries at Rough River Lake do not correspond with an elevation but rather they are specific areas described by metes and bounds legal descriptions. Field identification of the existing fee boundary and adjoining landowners' boundary lines is necessary to locate the flowage easement descriptions' points-of-beginning (POB's). The location of an easement's POB is critical in determining whether a structure is encumbered or not. In areas where reliable fee boundary survey data exists, the accuracy may be increased somewhat but this represents a small portion of the project and results will vary depending on the specifics of the individual descriptions. The majority of the legal descriptions' POB's are described as being wooden hubs in the original landowners' boundary lines. These wooden hubs do not exist today and their original locations must be recovered by traditional surveying methods. Similarly, other legal descriptions' POB's are described as being original lot corners that cannot be located without actual field surveys. Research of adjoining deeds, setting primary control points, recovering field monumentation and traversing the fee and easement boundary is necessary to accurately locate the flowage easement boundary.



Figure 1 – Rough River Lake - Portion of Survey Plat for U.S. Tract No. D-416-E

In many instances, structures that have been identified by field survey as encroachments are only encroaching on the order of a few feet. The expected accuracy of locating the easement boundaries without the benefit of survey data could be as much as 20-30 feet or more. As shown in Figure 1 above, if the easement boundary (shown as blue dashed line) is located only 5-10 feet in the wrong direction, then one could infer that dozens of encroachments exist in this location, when in fact none of the structures shown are actually located within the flowage easement limits. In many locations, the flowage easement boundary and residential structures are in very close proximity to one another. Without the aid of reliable survey data, placement of the easement boundaries in a GIS work space would be arbitrary and encroachment determinations would be erroneous.

The entire 319.8 mile shoreline at Rough River Lake does not need to be surveyed as a component of the Resolution Plan. The shoreline is approximately 22% developed, including those areas that are currently being developed or where development is imminent in the near term. The majority of the remaining shoreline (approximately 268 miles) is generally undeveloped and is considered protected. No private docks are allowed and these areas are not expected to incur any significant development in the foreseeable future. Those areas where

residential development has occurred or is likely to occur, have and will be given the highest priority. Project personnel will continue to identify high risk areas. However, the District believes it is important to eventually survey all flowage easement boundaries to identify the extent of Government ownership interests. The current 2015/16 survey contract cost is approximately \$9,000 per mile of flowage easement shoreline and includes 27.75 miles. Completion of the current survey contract is scheduled for April 2016. Upon completion of the current 2015/16 survey contract, the majority of the densely developed areas will have been surveyed for a total of approximately 51 miles.

The use of a private sector contractor to conduct industry standard surveys will be beneficial to the Government should the need arise to defend the location of the easement boundary in legal matters stemming from actions taken to resolve encroachments. Relying on “best guess” methods employed by utilizing GIS only is not recommended by the District. The survey contract deliverables include georeferenced easement boundary data which can be utilized in the field using a GPS by project staff to identify the flowage easement boundaries. This data will be used to prevent further encroachments for the life of the project. The project will be able to utilize GIS data in the management of the boundary for those areas where surveys have been completed and actual locations of the easement boundaries are known.

The use of unmanned aircraft systems (UAS) to identify flowage easement encroachments is prohibited by OASD (HD&GS) Policy Memorandum 15-002, “Guidance for the Domestic Use of Unmanned Aircraft Systems”, dated February 17, 2015. In addition, the use of a UAS would require the identification and recovery of the same control mechanisms referenced above to conduct a field survey.

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